

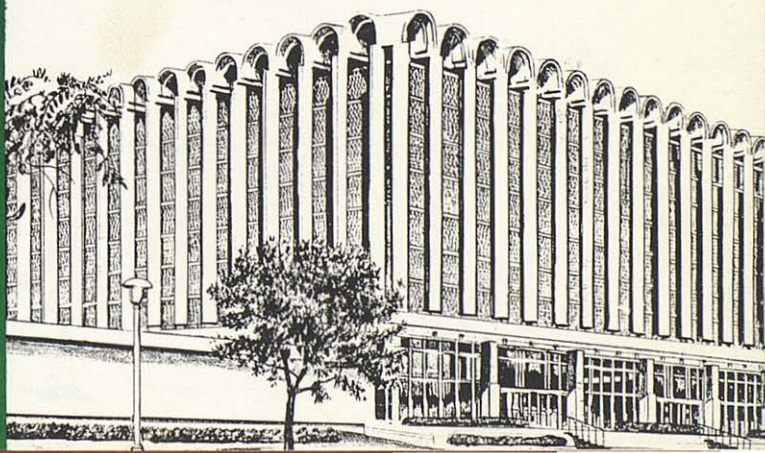


Bulletin of
TEXAS TECHNOLOGICAL COLLEGE

Vol. XLIV, No. 2, March 1968

Lubbock, Texas

**Summer School
Catalog
1968**



All inquiries and correspondence concerning admission to the College should be addressed to

Dean of Admissions
Texas Technological College
P.O. Box 4340
Lubbock, Texas 79409

Inquiries and correspondence having to do with room reservations in the residence halls should be addressed to

Coordinator of Residence Hall Room Reservations
Texas Technological College
P.O. Box 4629
Lubbock, Texas 79409

The student should become familiar with the contents of this catalog and should bring his copy with him when he comes to the campus.

The College requires that students with communicable diseases be isolated until, in the judgment of a college physician, danger of transmission has passed.

Teacher Certification. All individuals who enroll for the first time in a program leading to a certificate to teach in any subject on any level in the elementary and secondary schools should go to the office of the Dean of the School of Education for official forms and directions for executing a teacher certificate plan.

University Counseling Center. The College maintains the Counseling Center to help Texas Tech students in resolving academic problems, in selecting careers, in deciding on major fields of study, and in working through personal or emotional problems. The center also offers reading improvement and study skills courses at self-sustaining fees of \$25 and \$20, respectively. High school graduates and others who definitely plan to enter the College may utilize the center. The summer period is an appropriate time to work out suitable educational and vocational goals and to improve reading and study skills.

The Summer Session

The summer session is an integral part of the year-round program at Texas Technological College, and the facilities of the entire College are available. The faculty of regular staff members is augmented by visiting lecturers and professors. All classrooms, laboratories, and the College Library are at the disposal of summer school students.

The summer session is planned especially for the following groups:

1. **Entering Freshmen.** High school graduates who wish to accelerate their college programs may do so by entering college at the beginning of the summer session. Beginning courses are offered in almost all of the basic freshman curricula.

2. **Undergraduates.** Students of the long session will find the summer school profitable for making up courses or speeding up their college training.

3. **Teachers, School Administrators, and Special Certified Personnel.** The summer program, both undergraduate and graduate, is particularly designed to meet the needs of persons seeking certification as teachers and administrators in the elementary and secondary schools. In addition, the graduate program provides opportunity for individuals to meet requirements for new certification regulations in teaching, supervision, curriculum, and administration, as well as for conversion of certificates. Special seminars and workshops for teachers are available to meet special needs.

4. **Graduate students.** Full graduate work will be offered in summer school leading to the degrees indicated under "Graduate School."

Academic Regulations

Admission to Candidacy for Graduation. A student who registers for the semester or summer session in which he plans to complete work for a bachelor's degree, but who has less than the number of grade points required for graduation, will be granted only conditional admission to candidacy. In this status, the student's ordering of a diploma and making other plans for graduation will be entirely on his own responsibility.

Requirements for admission to candidacy for a master's or doctor's degree are explained in the *Graduate School Catalog*.

Summer School Commencement. A student who completes all work for any degree at the end of either term will have the degree conferred at the commencement program to be held the last day of the summer session. Summer Commencement is scheduled to be held on Saturday, August 24.

Class Work and Routine.

Student Load. The normal load for a six-week summer term is 6 semester hours. A student will not be permitted to register for, or secure credit in,

more than 14 semester hours in the two terms, including any correspondence work. Students who have not done work previously in Texas Technological College will regularly enroll for a maximum of 6 semester hours, exclusive of 1-hour physical education and orientation courses. A senior of superior ability and performance may, with the approval of his academic dean, enroll for 15 semester hours in the 12-week session if this arrangement will enable him to be graduated at the close of the current summer session.

Graduate students are limited to 6 hours in either term, or a total of 12 hours for the summer session.

Auditing Classes. Permission to audit classes may not be granted in case the classes are crowded and is not granted to students enrolled in summer session courses which are scheduled for less than the regular six-week term.

Class Attendance and Absence. Regular and punctual attendance in classes, laboratories, and other exercises at which the student is due, is required. Absences are counted from the first meeting of the class, regardless of the time when the student enrolls.

Explanation of Course Numbers. The numbers used for designating courses are uniform in all schools of the College. From left to right, the first digit indicates the college year in which the course is normally taken; the second digit shows the semester-hour value of the course; the last digit (or digits) is the departmental course number. To illustrate: English 131 is a freshman course with a credit value of 3 semester hours. See *General Catalog* for further explanation.

If the enrollment for a course or section of a course is not large enough, or if some unforeseen event makes it not feasible to offer any of the courses listed in this bulletin, the College reserves the right to cancel that course.

The student should consult the annual *General Catalog* for course descriptions and prerequisites.

Other Academic Regulations. For regulations covering suspension, withdrawal from college, dropping courses, grades, and other matters, see the current *General Catalog*.

Admission

The Dean of Admissions has charge of all matters pertaining to admission to any school of the College. Each new student is required to file an application on a blank which may be secured from the Admissions office, Administration Building, Room 162. In addition, regular students must submit complete high school transcripts and complete transcripts from all colleges previously attended. The new student is urged to send in credentials well in advance of registration date.

To enter the College as a freshman, an applicant takes the following steps:

1. Obtains an application for admission from the Dean of Admissions by applying in person, by mail, or by telephone.
2. Provides the Admissions office with an official transcript of his high school record. The applicant must assume the responsibility for having his record forwarded to the Dean of Admissions.
3. Files a health data form. This form is to be completed and returned by a physician to the Dean of Admissions.
4. Furnishes scores on the Scholastic Aptitude Test of the College Entrance Examination Board.
5. Decides which school or curriculum he wishes to enter. A student needing advice or counseling may come to the campus before registration day and consult with the dean of his school.

When an applicant's file is complete, that is, after his completed application form and all necessary supporting transcripts and records have been received, the case will be evaluated. Normally, if time permits, the applicant will be notified of his acceptance or rejection before he reaches the campus.

6. Reports to the College campus on the day indicated in the official College Calendar and in notices sent in reply to his application. All entering freshmen must report at the beginning of the freshman orientation period.

7. Pays fees on the days indicated for registration.

Freshman Orientation. All entering freshmen are required to assemble at the College for a period of orientation prior to actual registration June 5. This orientation is designed to assist the student in selecting a program of study and to aid the faculty and administration in guiding him.

Along with other credentials in support of their applications for admission, beginning students are required to submit their scores earned on the College Entrance Examination Board Scholastic Aptitude Test.

Tests are supplied by the College Entrance Examination Board, Post Office Box 592, Princeton, New Jersey 08540. High school counselors and principals usually secure these tests for those wishing to take them. It is the responsibility of the prospective student at Texas Technological College to take these tests during his senior year in high school. They may be taken at the College during the freshman registration, but students who wait until then to take them will be delayed in registering.

Uniform Minimum Requirements for Admission. Graduation from an accredited high school is the first entrance requirement for beginning freshmen. The following units are the uniform requirements for admission to the College:

1. English	3
2. Mathematics* (algebra, geometry, trigonometry)	2
3. Social science	2
4. Laboratory science	1
5. Electives	7

Removal of Deficiencies. A student who is admitted with deficiencies must remove them during his first two semesters of attendance at this College.

Special Admission Requirements. For admission to the schools of Agriculture, Business Administration, Education, and Home Economics there are no requirements beyond those listed above. For special programs in the School of Arts and Sciences and for entrance into the School of Engineering, see the annual *General Catalog* of the College.

Admission of Out-of-State Students. An applicant for admission who did not graduate from a Texas high school and who is not a legal resident of Texas must meet the following minimum requirements:

1. Have been graduated from an accredited high school with at least the 15 units listed above under "Uniform Minimum Requirements for Admission."
2. Have ranked in the top half of his high school graduating class.

Admission From Other Colleges and Universities. Undergraduate students who have attended another accredited college, who are in good standing there, and who are not under disciplinary or scholastic difficulty, may be accepted for admission to Texas Technological College if their performance at the other institution meets the standard at Texas Tech.

The student seeking admission from another college must present official transcripts of his entire academic record, both high school and college. His record must meet the minimum standards in one of the following categories:

A. If he originally enrolled for 12 or more semester hours during the last semester of attendance, and

1. Has registered for only one semester in college, he must have earned at least 6 semester hours of academic credit with grades of C or better in each course of the total 6 semester hours. (This does not mean a C average. One or two hour courses in Choir, Orientation, Band, Physical Education, ROTC, etc., are not counted for admission purposes to meet these requirements.)

2. Has registered for two, three, or four semesters, he must have earned at least 9 semester hours of academic credit with grades of C or better during his last semester in each course of the total 9 semester hours.

3. Has registered for five or more semesters, he must have earned at least 12 semester hours of academic credit with grades of C or better during his last semester in each course of the total 12 semester hours.

B. If he originally registered for less than 12 semester hours during his last semester in attendance elsewhere, he must have passed one-half of his hours with a grade of C or above during the semester.

Students whose academic standing is so low during their last semester of attendance at Texas Technological College that they are no longer eligible to continue may not gain readmission by attending summer session at another institution.

* Related Math I & II may be accepted to satisfy the mathematics requirement in the non-science, nonengineering majors. One unit in general mathematics may be accepted as a substitute for one of the required units in mathematics in the non-science, nonengineering majors. Courses falling under the description of arithmetic are not accepted as one of the uniform required units in mathematics.

Transfer of Credits From Other Colleges and Universities. In general, credit hours earned at another accredited institution with grades of C or better are accepted for transfer to Texas Tech.

Transcripts are evaluated twice for two purposes:

1. First, by the Admissions office to determine eligibility to enter Texas Tech.
2. Second, by the dean of the school in which the student applies to work for a degree at Texas Tech. This is to determine which courses completed at another institution can be accepted toward the degree sought at Texas Tech.

Since the College offers a number of degrees which require the fulfillment of widely differing curricula, the Dean of Admissions acceptance of credits from another college does not guarantee the use of all these credits in a given curriculum. The usefulness of transferred credit is determined by whether or not the work is equivalent to work in the curriculum or to permissible electives. After being admitted to the College and having his credits accepted by the Dean of Admissions, the student should consult with the dean of the school in which he plans to enroll to determine which credits will be acceptable in his particular program.

At the option of the academic dean, transferred courses with a grade of D or the equivalent may not be accepted for credit toward meeting requirements for the degree. Transfer credit in physical education activity courses, or substitutes for them, is accepted to the extent that it meets degree requirements, but grade points accumulated in such courses cannot be applied to reduce a deficiency of grade points in other subjects.

Grade points are computed as follows: for each hour of A—4; B—3; C—2; D—1; all other grades—0.

Students transferring credits from a nonaccredited institution must prove the value of all such credits by earning a 2.00 grade average on the first 30 hours of residence work at Texas Technological College. Students who did not meet the admission requirements of this College at the time they were admitted to a nonaccredited institution must successfully pass required testing before being admitted here. Credit earned at another institution will also be validated as indicated above.

A former student of the College who has afterward attended another institution will be considered as a transfer student when applying for readmission and will be required to meet the standards for such students.

Admission of Graduate Students. Full details of admission requirements for those wishing to enter the graduate program at Texas Technological College appear in the *Graduate School Catalog*, which is published annually. A copy may be secured from the office of the Dean of Admissions. It may be noted here, however, that those who wish to enter the graduate program in order to work toward a master's or doctor's degree will be required to take the Aptitude Test of the Graduate Record Examination. This may be done before enrollment or at the first examination date thereafter.

Concurrent Registration. Concurrent registration at Texas Technological College and other institutions is not permitted during the summer session.

Transient Students. Students enrolled in other colleges during the spring semester, who plan to attend the summer session only and return to the former colleges for the fall semester, may be admitted without the necessity of formal transcripts of record from the former colleges. Each transient student, however, must furnish a letter from the registrar of the previous college indicating classification and present scholastic standing. Admission as a transient student does not guarantee admission as a regular student in the following fall semester. Regular students must present transcripts and meet regular admission requirements. A transcript of work taken at Texas Technological College under the classification of "Transient Student" will be sent only to the college furnishing the letter of permission or letter of good standing. Students who have previously attended Texas Tech as regular students may not attend as transient students. They must make application for readmission and furnish transcripts.

Registration

Each semester and summer term opens with a registration period during which the formal process of enrollment in the College is completed. Prior to

registering for each semester or summer term, each student who completes the admission process is furnished registration materials with his notice of admission. These materials include the application for a registration permit packet and a form on which the student must indicate his local Lubbock address.

The student should complete and return these forms to the Registrar as soon as possible so that his Permit-to-Register may be processed and he may be assigned a registration time. Duplicate permits are not processed until the last day of registration, regardless of the registration time on the original permit.

Matriculation Number. The "Matriculation Number" is the student's social security number. This number must be furnished on all forms where it is requested as it is the primary means for maintaining his academic record.

Prospective students who do not have social security numbers should apply through their local post offices (or social security offices) in ample time to secure such numbers prior to application for admission.

Stop Enrollment. Insufficient information or improper information given by the student on any admission or registration form will constitute cause for the student to receive a "Stop Enrollment" card or "Notice of Permit Delay" in lieu of his regular Permit-to-Register. Suspension or probationary status also constitutes cause for the same action.

Name Change. Students who have a change in name after their last registration must provide a certified COPY of marriage certificate or COPY of court order which substantiates the legal name change. These documents must be submitted to the Registrar PRIOR to the ensuing registration to be effective for that semester of enrollment. Registration under a name different from the student's last enrollment cannot be accomplished without the above documents, which become a part of the student's permanent record file. All grade reports and transcripts are issued under the student's LEGAL name as recorded in the Registrar's office.

Transcript Service. Students may request copies of their academic records accumulated while at Texas Technological College as well as work transferred to the College. The first copy of a student's record, in whole or part, is furnished free of charge. Thereafter, a charge of \$1 per copy is assessed the student, payable in advance. Adequate advance notice of requests, normally one week, is required for transcript processing. All transcripts must be requested by the student and all requests should be made in writing.

Fees and Deposits

General Fees.

Payment.* All fees and deposits are payable in full at the time of registration. During the summer session, tuition and fees are paid after a student's schedule is approved by his academic dean. No refund will be made for courses dropped. All checks, money orders, and drafts are accepted subject to final collection.

Veterans of the Spanish-American War, World War I, World War II, or Korea, who are residents of Texas, may be eligible for benefits of the Hazlewood Act. See the Veteran Coordinator in the Registrar's office.

Registration Fee for Resident Students.** For legal resident students of the state of Texas, registration fee for a six-week term is \$25. For resident students who enroll for less than 4 semester hours in any six-week term, the registration fee is \$20 per term.

Registration Fee for Nonresident Students.** For nonresident students, the registration fee for a six-week term is \$100. For nonresident students who enroll for less than 4 semester hours in any six-week term, the registration fee is \$75 per term.

Student Union Fee. This is a compulsory fee of \$2.50 per six-week term as authorized by the legislature.

* Texas Technological College reserves the right to change fees in keeping with acts of its Board of Directors or the Texas Legislature.

** For the official interpretation of the terms "resident" and "nonresident," see the General Catalog. Each student is held responsible for a proper classification of his own residency status according to these regulations throughout the period of his registration at Texas Technological College.

Building Use Fee. This is a compulsory fee of \$12.50 per six-week term as authorized by the legislature.

Laboratory Fees. For all courses in which the combined credit of lecture and laboratory is from 1 to 3 semester hours, a laboratory fee of \$2 is charged for each term. For courses in which the semester credit is 4 semester hours or more, the laboratory fee is \$4 per term.

General Property Deposit. A breakage deposit of \$7 is required from each student to cover breakage, library fines, or damage to College property or equipment while in the student's possession or use. The deposit, less charges, will be returned to the student at his request upon termination of his tenure here as a student.

Graduation Fee. Graduating students will be charged a graduation fee of \$5 for each degree granted. The fee will be refunded if the student cancels his graduation intentions before the diploma has been printed and before other related steps are taken.

If the student does not cancel his intention to graduate in time, he must pay \$2 for reordering the diploma insert only. If both the insert and the cover have to be reordered, the charge will be \$5, as in the initial order. Students who graduate *in absentia* will pay an additional fee of \$1.50.

Graduate Fees. The cost of such research items as questionnaires, charts, maps, slides, microfilm, photostats, postage, etc., required by a graduate student for the completion of a thesis or research problem forming part of a graduate program for an advanced degree will be borne by the student.

Special Fees.

Geology 363*.

Tuition	\$ 25(a)
Room and Board	140
Course Fee	40
Transportation Fee	35

Total \$240

(a) Resident Tuition; Nonresident Tuition is \$100.

Physical Education 4321.\$ 12.50

Workshop Fees. Each one-week workshop with 1 semester hour of credit has a registration fee of \$10, plus a \$1 health fee.

Fees for other workshops will be based upon credit given.

Duplicate Receipt Fee. A fee of 50 cents will be charged for each duplicate registration receipt issued.

Change in Class Schedule Fee. A fee of \$3 will be paid each time a student initiates a change in his previously approved class schedule. There will be no charge when the change is made for the convenience of the College.

Music Fees for Private Instruction. Additional fees, payable at the time of registration, are charged for individual instruction in voice, piano, organ, strings, and wind instruments in the following courses in applied music:

M AP 115, 116, 215, 216, 315, 316	\$ 6
M AP 125, 126, 225, 226, 235, 236, 325, 326, 345	
346, 425, 426, 435, 436, 445, 446, 535, 545	\$12

Practice room and piano rental payable at the Cashier's office.

One hour per day per six-week term \$ 4

Each additional hour per day per six-week term \$ 2

Auditing a Course for No Grade. Students enrolled for 11 semester credit hours or less must pay a fee of \$10 for the privilege of auditing a course.

Students enrolled for 12 semester credit hours or more who have obtained written permission from the dean may audit a course without paying an additional fee. (See section titled "Enrollment Without Credit.")

Student Services Fee. This is a \$3 fee that each student must pay each term of the summer session. This fee provides for health service and the *University Daily*.

Refund of Fees. Any student withdrawing officially during the first week of either summer term will receive a refund of 60 percent of any registration fees paid, and during the second week, 20 percent. A student who withdraws

* A deposit of \$25 must be made on or before April 1, 1968, for the geology field course. This deposit is refundable up to May 1, 1968; it is forfeited as of this date if the student decides not to enroll for the field course.

during the third week and thereafter of either summer term will receive no refund.

Once a student has registered for a laboratory class and attended the class, no refund of the laboratory fee will be made unless the College is at fault.

In no case will fees be refunded to a student expelled from the College by College authorities.

Refund of tuition or fees will not be made on courses of less than six-week duration.

The unused balance of the property deposit will be held at least 60 days after the close of a semester, or after a student withdraws during a semester, so that all charges and fines may be accumulated from the various departments.

Summary of Expenses for Six-Week Term.

Registration Fee (legal resident of Texas)	\$ 25.00
General Property Deposit (refundable)	7.00
Student Union Fee (required)	2.50
Laboratory Fees (approximate)	4.00
Books and Supplies (approximate)	20.00
Student Services Fee	3.00
Building Use Fee	12.50
Total for six-week term (estimated)	\$ 74.00

For estimated costs, including residence hall room and board, add charges for the proper residence hall as shown below in the section entitled "Housing Facilities."

Engineering students are required to purchase their own drawing equipment, slide rule, and other specialized items which cost approximately \$55. These items, which entail extra expense at first, are utilized throughout the students' four years of study. Moreover, not all of this equipment need be purchased during the summer session, depending on the type of engineering courses taken.

Housing Facilities

All prices indicated are subject to change without notice prior to registration date and with ten (10) days notice thereafter.

Single rooms may be assigned at additional cost if facilities are available.

Room and Board Charges. The cost for a six-week term in the College air-conditioned residence halls, two persons per room, payable in advance, is \$145. The above charge includes 20 meals per week. No meal is served on Sunday evening.

Occupants of the residence halls are expected to furnish pillows, towels, bed linens, blankets, spreads, and other personal articles needed. There will be no residence halls linens available for rental to the regular summer session students.

Room Reservations. An application for a room in a residence hall on the Texas Tech campus may be secured by sending a request to the Office of Room Reservations, Box 4629, Texas Technological College, Lubbock, Texas 79409. Do not send a deposit with your request.

Upon receipt of your request for information, an application form for housing, along with a general information sheet on the charges for room and board and the amount of the deposit to be returned with the application, will be forwarded to the prospective student.

The application for housing is to be completed and returned with a check or money order for forty (\$40) dollars to the Office of Room Reservations. Do not send the application or the deposit to the Registrar's office. This will only delay the processing of the application. The deposit will be refunded, less any breakage charges, if the student leaves at the end of the first or second summer term. Should a student find he is unable to enroll in the College, he will receive a refund of his deposit if application is made in writing to the Office of Room Reservations on or before May 15 for the first term, or June 30 for the second term. All unclaimed rooms in the residence halls will be declared vacant at 8 a.m. on the first day of classes, and the deposit will be forfeited. If a student enrolls for the session, but does not claim his reserved room, he will be subject to room and board charges for the space reserved until permission to live off campus is received in writing at the Office of

Room Reservations, from the Dean of Men or Dean of Women. The deposit will also be forfeited if the student moves from his residence hall at any other time during the summer term for any other reason. This includes the student who is dropped from school for disciplinary action.

Conference and Short Term Facilities. Persons wishing to arrange for housing and food services for conferences, or individuals desiring to register for workshops, institutes, or short courses for periods of less than a full summer term, may write directly to the Director of Residence Halls, Box 4639, Texas Technological College, Lubbock, Texas 79409, for information about such facilities.

Students who will be on campus for Summer Orientation for Freshmen, may also make individual reservations for rooms in the residence halls by contacting the Director of Residence Halls.

Short Term Guest Rates, 1968.

TYPE OF ROOM*	Wiggins Complex		Hulen, Clement, Wall-Gates, and Stangel-Murdough halls	
	Per day	Per week	Per day	Per week
Room with maid service (includes linen):				
Double room	\$4.50	\$27.00	\$4.00	\$24.00
Single room	6.50	40.00	6.00	36.00
Room without maid service:				
Double room with linen	3.75	22.50	3.00	19.00
Double room without linen	3.25	20.00	2.75	16.50
Single room with linen	5.50	33.00	4.75	29.00
Single room without linen	5.00	30.00	4.25	26.00
FOOD SERVICE				
	Daily		Sunday	Weekly
Breakfast	\$.80		\$.80	20 meals
Lunch	1.15		1.65	\$20.00
Dinner	1.25		1.65	

No refunds will be made for meal tickets purchased in advance, but not used.

For further information on special services, banquets, etc., contact the office of the Director of Residence Halls, Texas Technological College, Box 4639, Lubbock, Texas, Telephone No. 742-6211.

Institutes, Workshops, Short Courses, and Field Trips

Students planning to enroll in short courses and workshops for college credit are requested to register in person or by mail prior to June 5-6, even though the beginning date of the course occurs later in the summer term.

Short-term housing facilities are available in air-conditioned rooms in the residence halls. For information see "Housing Facilities."

School of Arts and Sciences

Art Workshop. This workshop, offered for either undergraduate or graduate credit, will be conducted in Taos, New Mexico, in two, three-week sessions. The June 4 to June 21 session will include drawing, ceramic sculpture, and beginning oil painting under the direction of Clarence Kincaid, Juanita Pollard, and guest instructors. The June 24 to July 12 session will include jewelry, watercolor, and advanced oil painting under the direction of Clarence Kincaid, Juanita Pollard, and Francis Stephen. Morning sessions will be conducted in a studio and afternoons will be spent working on location, visiting galleries, and touring studios of Taos artists. Guest lectures, demonstrations, and critiques will be given by Taos artists of national renown.

* All rooms air-conditioned; rates per individual.

Undergraduates will enroll in Applied Arts 3314, and graduate students in Applied Arts 534. Residents of Texas will pay a fee of \$45 for 3 weeks and \$75 for 6 weeks. Nonresidents of Texas will pay a fee of \$100 for 3 weeks and \$150 for 6 weeks. Students must make their own arrangements for living accommodations.

For further information direct inquiries to Bill Lockhart, Chairman of the Department of Art, Texas Technological College, Lubbock, Texas 79409. Students should initiate preenrollment with the Department of Art before May 1, but registration will be permitted June 3 if classes are not full.

Jewelry Workshop. This workshop will be offered for either undergraduate or graduate credit from June 4 to June 21 under the direction of Francis Stephen and will meet afternoons. The major emphasis of the workshop will be in casting.

Students will enroll in Applied Arts 4351 at a fee of \$23 for Texas residents or \$70 for nonresidents. Students may enroll by mail or at the regular registration on June 4 and 5. Preenrollment by mail should be initiated with Bill Lockhart, Chairman, Department of Art, before May 1.

Sculpture Workshop. This workshop will be offered for either undergraduate or graduate credit from June 24 to July 12 under the direction of John Queen and will meet afternoons. The major portion of the work will be in experimental aluminum casting.

Students will enroll in Applied Arts 4321 at a fee of \$23 for Texas residents or \$70 for nonresidents. Students may enroll by mail or at the regular registration on June 4 and 5. Preenrollment by mail should be initiated with Bill Lockhart, Chairman, Department of Art, before May 1.

Art Education Workshop. Emphasis will be concentrated on practical projects to prepare the enrollees to apply these art experiences directly in classroom situations with elementary-age children. This course, conducted by Peggy Howard, is planned for teachers, recreation leaders, and adults who work with young children. While the structure of the workshop stresses three main areas of classroom work with children, each year the projects are different and selected with regard to new materials, methods, and philosophies in art education. The workshop may be taken for one, two, or three weeks as follows:

First week, June 4 to 8, stressing crafts. This week will include experiences with balsa wood, cardboard, construction paper, reed, clay, and other three-dimensional materials.

Second week, June 10 to 14, stressing bulletin boards and displays. This week will include simple lettering, posters, bulletin boards, and the application of creative ideas for display of children's art.

Third week, June 17 to 21, stressing drawing and painting for elementary children. This will include projects and ideas with crayons, tempera colors, watercolors, India ink, and mixed media.

Students enrolling for any one week only enroll in Applied Arts 511-A, at a fee of \$13. Students enrolling for any two weeks enroll in Applied Arts 511-B and 511-C, at a fee of \$25. Students enrolling for all three weeks enroll in Applied Arts 535, at a fee of \$23 for Texas residents or \$70 for nonresidents. Students attending the first week may preenroll by mail or at regular registration, June 4 and 5; all others should preenroll by mail, initiated with Bill Lockhart, Chairman of the Department of Art, before May 1.

Biology Teachers Institute. With the goal of increasing the effectiveness of the teaching of biology in high schools, the National Science Foundation, through a grant to the Department of Biology, is sponsoring an institute for teachers of biology from June 6 to August 8. Lectures, demonstrations, and field trips will provide an outstanding educational experience for participants, who may earn 9 semester hours of credit. The director of the institute will be Paul V. Prior, Professor of Biology, to whom inquiries concerning this program should be addressed.

Field Course in Mexico, 1968. A group study course, Spanish 4328, 4329, is offered each year in Mexico during the second term of the summer session. It is a study of various phases of pre-Hispanic and Hispanic civilizations (history, arts, language, and literature), and is designed for those who are preparing to teach Spanish or enter government service or who simply wish to acquire fluency in Spanish and an intimate knowledge of Mexican culture. Students stay at a hotel and in private homes in San Luis Potosi. During the week they attend class, visit places of interest in and near the city, and

have the opportunity to go to operas, concerts, plays, lectures, exhibitions, and bullfights. In August a field trip is scheduled to Mexico City. This course may be taken for 6 hours of advanced undergraduate or graduate credit. Registration will be on July 15, the first day of the second summer term, and the group will depart on July 17, returning on August 20. For additional details write Professor Harley D. Oberhelman, Department of Classical and Romance Languages, Texas Technological College, Lubbock, Texas 79409.

High School Newspaper-Yearbook-Photography Workshop. With the aid of a grant from the Newspaper Fund, Inc., the Department of Journalism will offer a photojournalism workshop for high school and junior college teachers from July 14 to July 27. Students may secure 2 hours of upper division or graduate credit.

The Department of Journalism and the Southwestern Council of Student Publications will jointly sponsor a photojournalism workshop for students and teachers July 28 to August 2 and the eleventh annual five-day workshop for high school students and teachers August 4 to 9.

Specialists will aid students and teachers with a variety of problems met on scholastic publications. Newspaper participants will work on an experimental newspaper under close supervision. Yearbook editors and business managers will be assisted in the actual planning of their books. Photographers will receive intensive training in picture shooting and darkroom procedure.

A registration fee of \$15 is charged. No college credit is offered for the two, five-day workshops. For details and reservations, write the Department of Journalism, Texas Technological College.

Summer Music Camp (Precollege). The College maintains a large summer band, orchestra, choral, and piano program, concurrent with the first summer term. A wide range of courses is offered during this period. A large staff of instructors augments the regular College staff in making these offerings possible.

Nationally known conductors and instructors have been invited to conduct each activity. For further information, write to the Music Department, Texas Technological College, Lubbock, Texas 79409.

Band. Three or more bands are open to accommodate students at various levels of advancement. Special instructors on all wind instruments offer instruction in technique. Percussion and baton twirling instructions are available to those interested, and precollege theory classes are open to all precollege students. Band camp is held July 14 to 26.

Chorus. A strong program for high school students and church choir directors is offered July 14 to 26 in choral music, stressing repertoire, tone production, rhythmic precision, small group lessons in voice, and classes in theory.

Orchestra. College and public school instructors will join forces to conduct the eleventh annual summer program in orchestra for string students at elementary, intermediate, and advanced levels. The junior high-elementary camp and the senior high school camp are July 14 to 26.

Piano. A five-day workshop in early June featuring a nationally known artist-teacher is one of the highlights of the summer piano school. Courses for elementary, intermediate, and advanced students and teachers are offered with a special emphasis on piano repertoire, interpretation, and technique.

Workshop in Directing School Speech Activities. Speech 4325 will be offered as a workshop during the first half of the first summer term, July 15 to August 3. The first week will be primarily lecture and preparation for activities of the High School Dramatics and Forensics Workshop. The combination of these two workshops provides the high school teacher practical experience in problems and opportunities present in school speech activities. Both active participation in directing and observation of discussion, debate, declamation, dramatics, extemporaneous speaking, and poetry reading are possible.

Dramatics and Forensics (High School) Workshop. A workshop in dramatics and forensics for high school students will be conducted by the Speech Department, July 21 to August 3. It is open to any high school sophomore or junior, or outstanding freshman of the 1967-68 school year. Scholarships will be given to any eligible student who places on the all-star cast of the state or any regional one-act play contest, or who places on the winning debate team in the state or any regional contest, or who places first in any other state or regional speech contest in 1968.

The program will include study and practice in effective speech, voice, diction, personality development, role-playing, bodily action, and the development of good speech habits. Students will have opportunity to participate, under skilled supervision, in plays, discussions, debates, and radio programs, according to their interests.

Students interested in dramatics will produce as many plays as can be cast from the group. The theory and practice of makeup, costume, and lighting, as well as acting, will be included.

The problem of the 1968-69 forensics seasons will be the basis for study and practice of principles involved in effective discussion, public speaking, and debate. Each student will participate in several practice sessions, culminating in a public demonstration at the conclusion of the session.

For further information direct inquiries to the Department of Speech, Texas Technological College, Lubbock, Texas 79409.

School of Education

Elementary School Science Workshop. The workshop in Elementary School Science is scheduled for June 10 to June 28. The major purpose of this workshop is to help teachers develop more effective methods of teaching science to elementary school children. The workshop will deal specifically with the methods and materials for teaching science more effectively. Outstanding consultants will be featured on the staff of the workshop, which carries 3 hours credit. Students will enroll in Education 5139 (Sections 1, 2, 3), Elementary School Science. Alex Crowder, Assistant Professor of Elementary Education, will direct the workshop. Inquiries about early registration, fees, and other information should be addressed to him.

School Business Services Workshop. The workshop in School Business Services will be held June 24 to June 28. If credit is desired, register for Education 5139 (Section 4) for 1 semester hour. Berlie Fallon, Chairman of the Department of Education, will direct the workshop. For information please write to him.

School Personnel Administration Workshop. The workshop in School Personnel Administration will be conducted from July 17 to August 6. Morris Wallace, Professor of Education, will direct the workshop which carries 3 hours credit. Such topics as the relationship between professional organizations of teachers and school boards and administration will be studied. The area of professional negotiations will be given special attention.

School of Home Economics

Workshops in Clothing and Textiles. Each week of these three one-week workshops (July 1 to 6, August 5 to 9, August 12 to 17) will emphasize a different area as shown below. Graduate students may enroll for one, two, or three weeks to earn 1, 2, or 3 graduate semester hours credit.

July 1 to 6, Special Problems in Family Clothing. Enroll in Clothing and Textiles 511-A. Gene Shelden and Myra Timmons will present this workshop considering the social, economic, and psychological aspects of clothing the family.

August 5 to 9, Teaching Clothing Creatively. Students should enroll in Clothing and Textiles 511-B, which will be taught by Mildred Groves Ryan. She is on the staff of *McCall's* magazine and *Forecast*, for which she writes on topics concerning clothing and textiles.

August 12 to 17, Advanced Techniques in Fitting. Students will enroll in Clothing and Textiles 511-C, to be taught by Thelma Berry. A recognized authority on the problems of clothing construction, she teaches at the University of Southern Illinois.

Fees are \$13 for each week. Preenrollment by mail should be initiated with Gene Shelden, Chairman, Clothing and Textiles Department, before June 1.

Workshop on Advanced Food Production Management. Food and Nutrition 421, to be conducted June 6 to 19, is a workshop planned to meet the academic requirements of the American Dietetic Association for further study of managerial aspects of quantity food production. Students may enroll at regular registration on June 5.

Workshop for Food Service Workers in Small Hospitals. This workshop is planned to provide concentrated training for quality food service for workers in small hospitals. Enrollment may be for the first or for both weeks.

June 4 to 8 — Food and Nutrition 111-A—newcomers

June 10 to 14—Food and Nutrition 111-B—repeaters

Fees are \$13 for each week. Students may enroll at the regular time on June 5.

Workshop in Current Trends in Food Administration. This workshop is planned for dietitians and home economists actively engaged in food professions. It will stress current trends in food and nutrition.

The course is Food and Nutrition 515-A to be held from June 10 to 14 and provides 1 hour of graduate credit.

Students may enroll at the regular time, June 5 to 6.

Food and the Consumer Workshop. This workshop is designed to help home economists understand current trends in food marketing, processing, and selection of food for intended use as well as cost analysis in recent economic trends. Ilse H. Wolf, Professor of Home Management, will teach the course.

The course is Food and Nutrition 515-A to be held from July 29 to August 2 and provides 1 hour of graduate credit.

Short Courses in Home Economics Education. Listed below is a series of three 1-hour short courses dealing with issues and innovations in home economics education. Fees for each are \$13. Preenrollment by mail should be initiated with L. Ann Buntin, Chairman, Home Economics Education Department before May 1 for the first course and before June 1 for the second and third.

Home Economics Education 514-1, Creative Teaching and New Media, July 9 to 13. The changing concept of educational media due to advances in technology makes an understanding of developments in media important to today's teacher. Therefore, students will have an opportunity to consider newer media and explore their possibilities for providing challenging learning environments.

Home Economics Education 514-2, Home Economics' Responsibility to Serve the Disadvantaged, July 15 to 19. It is designed to assist teachers study problems and work toward new solutions in teaching disadvantaged youth.

Home Economics Education 514-3, New Directions in the Use of Selected Teaching Techniques, July 22 to 26. New approaches in the selection and use of teaching techniques will be analyzed. Opportunities for increasing competency in their use and exploring their practical application will be provided.

Home and Family Life Workshops. For the convenience of professional home economists this department is offering three one-week workshops as described below. Tuition for each course is \$11.

Time will be saved in registering if request for admission to Texas Technological College is made to the Dean of Admissions by June 1. Anyone coming in for the last of these three workshops should register at the regular time, July 15-16, or by preenrollment by mail initiated through Estelle H. Wallace, Chairman, Home and Family Life Department, by June 1.

CDFR 518-1, Seminar in Child Development and Family Relations, July 15 to 19, for high school and college home economics teachers. Donald S. Longworth, Professor of Home and Family Life, will offer an intensive one-week workshop dealing with the newer approaches in teaching human relations to the high school and beginning college student. Current needs, concepts, and literature available will be presented.

CDFR 518-2, Seminar in Child Development, July 15 to 19, for county home demonstration agents. This workshop will be presented by J. Joel Moss, Professor of Child Development and Family Relations, Brigham Young University. The course will meet the needs of county home demonstration agents by giving them current training in planning and leadership programs in child development and family relations. Emphasis will be placed upon current concepts in program building in this field. Methods of presenting this material to various age groups with whom the county home demonstration agents work will be stressed.

CDFR 518-3, Seminar in Family Relations, July 22 to 26. June Henton, Associate Professor of Home and Family Life, will teach a special workshop

for home demonstration agents who are interested in current methods and materials in family relations. Emphasis will be placed upon the newer approaches, materials, and methods of presenting human relations for the home demonstration agents who work with various age groups.

School of Agriculture

The summer session for the School of Agriculture will include undergraduate courses in agricultural economics, agricultural education, agricultural engineering, agronomy and range management, animal husbandry, dairy industry, entomology, horticulture, park administration, and veterinary science.

Complete curricula in all phases of technical agriculture will not be available. The curricula, however, are planned to provide instruction for new students, for those desiring to make up work, and for students wishing to accelerate their course of study or to complete requirements for a degree.

Graduate courses in agricultural economics, agricultural education, agricultural engineering, agronomy and range management, animal husbandry, dairy industry, horticulture, park administration, and entomology are provided for those students desiring to earn a Master of Science degree.

Agricultural Economics

First Term

For Undergraduates

235. Fundamentals of Agricultural Economics. Cr. 3.

For Undergraduates and Graduates

430. Special Problems in Agricultural Economics. Cr. 3.
431. Livestock Marketing. Cr. 3.
4311. Agricultural Finance. Cr. 3.

For Graduates

533. Seminar in Agricultural Marketing. Cr. 3.
534. Research in Agricultural Economics. Cr. 3.
631. Master's Thesis. Cr. 3.

Second Term

For Undergraduates

236. Principles of Marketing Agricultural Products. Cr. 3.
333. Cooperatives in Agriculture. Cr. 3.

For Undergraduates and Graduates

430. Special Problems in Agricultural Economics. Cr. 3.
435. Agricultural Policies and Organizations. Cr. 3.

For Graduates

631. Master's Thesis. Cr. 3.

Agricultural Education

First Term

For Graduates

522. Advanced Methods in High School Vocational Agriculture. Cr. 2.
523. Advanced Methods in Adult Agricultural Education. Cr. 2.
524. Advanced Methods in Future Farmer Work. Cr. 2.
531. Investigation in the Field of Agricultural Education. Cr. 3.
532. Research Methods in Agricultural Education. Cr. 3.
535. Problems. Cr. 3.
630. Master's Report. Cr. 3.
631. Master's Thesis. Cr. 3.

*Second Term***For Graduates**

531. Investigation in the Field of Agricultural Education. Cr. 3.
 535. Problems. Cr. 3.
 630. Master's Report. Cr. 3.
 631. Master's Thesis. Cr. 3.

Agricultural Engineering*First Term***For Undergraduates and Graduates**

430. Agricultural Engineering Problems. Cr. 3.
 435. Farm Mechanics Problems. Cr. 3.

For Graduates

530. Agricultural Engineering Research. Cr. 3.
 538. Advanced Technical Problems in Agricultural Engineering. Cr. 3.
 631. Master's Thesis. Cr. 3.

Second Term

(No Classes)

Agronomy and Range Management*First Term***AGRONOMY****For Undergraduates**

241. Soils. Cr. 4. 9 lec. hrs., 6 lab. hrs.
 341. Fundamental Principles of Genetics. Cr. 4. 9 lec. hrs., 6 lab. hrs.

For Undergraduates and Graduates

430. Agronomy Problems. Cr. 3.

For Graduates

534. Research. Cr. 3.
 631. Master's Thesis. Cr. 3.

RANGE MANAGEMENT**For Undergraduates and Graduates**

432. Range Management Problems. Cr. 3.

For Graduates

534. Range Research. Cr. 3.
 631. Master's Thesis. Cr. 3.

*Second Term***AGRONOMY****For Undergraduates and Graduates**

430. Agronomy Problems. Cr. 3.

For Graduates

534. Research. Cr. 3.
 631. Master's Thesis. Cr. 3.

RANGE MANAGEMENT**For Undergraduates and Graduates**

430. Wildlife Problems. Cr. 3.

For Graduates

534. Range Research. Cr. 3.
 631. Master's Thesis. Cr. 3.

Animal Husbandry*First Term***ANIMAL HUSBANDRY****For Undergraduates**

331. Principles of Feeding. Cr. 3.
 430. Special Problems in Animal Husbandry. Cr. 3.

For Undergraduates and Graduates

431. Beef Cattle Production. Cr. 3.
 432. Animal Breeding. Cr. 3.

For Graduates

533. Techniques in Animal Research. Cr. 3.
 534. Research in Animal Science. Cr. 3.
 631. Master's Thesis. Cr. 3.

*Second Term***ANIMAL HUSBANDRY****For Undergraduates**

430. Special Problems in Animal Husbandry. Cr. 3.

For Graduates

533. Techniques in Animal Research. Cr. 3.
 534. Research in Animal Science. Cr. 3.
 631. Master's Thesis. Cr. 3.

VETERINARY SCIENCE**For Undergraduates**

331. Anatomy of Farm Animals. Cr. 3.

Dairy Industry*First Term***For Undergraduates**

131. Principles of the Dairy and Food Industries. Cr. 3.

For Undergraduates and Graduates

430. Food and Dairy Industry Problems. Cr. 3.

For Graduates

531. Food and Dairy Industry Research. Cr. 3.
 631. Master's Thesis. Cr. 3.

*Second Term***For Undergraduates and Graduates**

430. Food and Dairy Industry Problems. Cr. 3.

For Graduates

535. Food and Dairy Bacteriology Research. Cr. 3.
 631. Master's Thesis. Cr. 3.

Park Administration, Horticulture, and Entomology*First Term***PARK ADMINISTRATION****For Undergraduates**

330. Problems Course. Cr. 3.

For Undergraduates and Graduates

430. Park Administration Problems. Cr. 3.

For Graduates

531. Park Administration Research. Cr. 3.
 631. Master's Thesis. Cr. 3.

HORTICULTURE**For Undergraduates and Graduates**

425. Horticulture Problems. Cr. 2.
 430. Horticulture Problems. Cr. 3.

For Graduates

531. Horticulture Research. Cr. 3.
 631. Master's Thesis. Cr. 3.

ENTOMOLOGY**For Undergraduates and Graduates**

431. Agricultural Compounds. Cr. 3. 7½ lec. hrs.

For Graduates

531. Entomology Research. Cr. 3.
631. Master's Thesis. Cr. 3.

Second Term

PARK ADMINISTRATION

For Graduates

531. Park Administration Research. Cr. 3.
631. Master's Thesis. Cr. 3.

HORTICULTURE

For Undergraduates and Graduates

430. Horticulture Problems. Cr. 3.

For Graduates

631. Master's Thesis. Cr. 3.

ENTOMOLOGY

For Graduates

531. Entomology Research. Cr. 3.
631. Master's Thesis. Cr. 3.

<h2 style="margin: 0;">School of Arts and Sciences</h2>

The course offerings of the departments within the School of Arts and Sciences have been selected with two purposes in mind. Since the summer session is an integral part of the college year, courses are offered to enable the regular student to continue his program of studies. The entering student can begin his college work in an orderly manner. Hence, courses of all levels from freshman to graduate are included in the summer offerings. Another continuing function of the summer school is to provide courses for those who do not attend the regular sessions.

Art

First Term

APPLIED ARTS

For Undergraduates

131. Design Applied to Daily Living. Cr. 3.
132. Introduction to Crafts. Cr. 3.
337. Art in Elementary Education. Cr. 3.
3314. Design Problems. Cr. 3.
3314. Design Problems. Cr. 3. (June 4-21, Taos, New Mexico)
3314. Design Problems. Cr. 3. (June 24-July 12, Taos, New Mexico)

For Undergraduates and Graduates

411. Special Problems in Applied Arts. Cr. 1.
4321. Sculpture Problems. Cr. 3. (June 24-July 12)
4351. Jewelry Problems. Cr. 3. (June 4-21)

For Graduates

511. Advanced Applied Arts Unit. Cr. 1.
511. Advanced Applied Arts Unit. Cr. 1. (June 4-8)
511. Advanced Applied Arts Unit. Cr. 1. (June 10-14)
511. Advanced Applied Arts Unit. Cr. 1. (June 14-21)
531. Special Problems in Applied Arts. Cr. 3.
531. Special Problems in Applied Arts. Cr. 3. (June 4-21, Taos, New Mexico)
531. Special Problems in Applied Arts. Cr. 3. (June 24-July 12, Taos, N.M.)
532. Research Methods in Applied Arts. Cr. 3.
535. Advanced Studio: Three-Dimensional Design. Cr. 3. (June 4-21)
5335. Theory and Practice of Art for Elementary Teachers. Cr. 3.

ALLIED ARTS**For Undergraduates**

131. History of Art. Cr. 3. 7½ lec. hrs.
For Undergraduates and Graduates
 421. Art Workshop. Cr. 2. 18 lab. hrs.

*Second Term***APPLIED ARTS****For Undergraduates**

337. Art in Elementary Education. Cr. 3.
 338. Art in Elementary Education. Cr. 3.
 3314. Design Problems. Cr. 3.

For Graduates

511. Advanced Applied Arts Unit. Cr. 1.
 531. Special Problems in Applied Arts. Cr. 3.
 535. Advanced Studio: Three-Dimensional Design. Cr. 3.

ALLIED ARTS**For Undergraduates**

132. History of Art. Cr. 3. 7½ lec. hrs.
For Undergraduates and Graduates
 421. Art Workshop. Cr. 2. 18 lab. hrs.

Biblical Literature*First Term***For Undergraduates**

132. Introduction to the New Testament. Cr. 3.
 331. The Gospel and Letters of John. Cr. 3.
 332. Religions of the World. Cr. 3.
 422. The Book of Revelation. Cr. 2.

*Second Term***For Undergraduates**

110. Introduction to Biblical Studies. Cr. 1.
 132. Introduction to the New Testament. Cr. 3.

Biology*First Term***BIOLOGY****For Undergraduates**

141. Botany. Cr. 4. 9 lec. hrs., 9 lab. hrs.
 142. Zoology. Cr. 4. 9 lec. hrs., 9 lab. hrs.

BOTANY**For Undergraduates**

334. Taxonomy of the Flowering Plants. Cr. 3. 6 lec. hrs., 9 lab. hrs.

For Graduates

531. Problems in Botany. Cr. 3. 19 lab. hrs.
 535. *Field Botany. Cr. 3. 18 lab. hrs.
 536. Taxonomy of Lower Green Plants. Cr. 3. 6 lec. hrs., 9 lab. hrs.
 538. Advanced Taxonomy of the Vascular Plants. Cr. 3. 6 lec. hrs., 9 lab. hrs.
 631. Master's Thesis. Cr. 3.

MICROBIOLOGY**For Undergraduates and Graduates**

331. General Bacteriology. Cr. 3. 12 lec. hrs., 18 lab. hrs. First 3 weeks.
 430. Advanced General Bacteriology. Cr. 3. 12 lec. hrs., 18 lab. hrs. First 3 weeks.

ZOOLOGY

For Undergraduates

243. Human Anatomy and Physiology. Cr. 4. 9 lec. hrs., 9 lab. hrs.

For Undergraduates and Graduates

333. Parasitology. Cr. 3. 6 lec. hrs., 9 lab. hrs.
439. Comparative Animal Physiology. Cr. 3. 6 lec. hrs., 9 lab. hrs.

For Graduates

531. Problems in Zoology. Cr. 3. 18 lab. hrs.
631. Master's Thesis. Cr. 3.

Second Term

BIOLOGY

For Undergraduates

141. Botany. Cr. 4. 9 lec. hrs., 9 lab. hrs.
142. Zoology. Cr. 4. 9 lec. hrs., 9 lab. hrs.

For Undergraduates and Graduates

331. *Heredity. Cr. 3. 18 lec. hrs. First 3 weeks.
333. *Bio-Ecology. Cr. 3. 18 lec. hrs. First 3 weeks.

BOTANY

For Graduates

531. Problems in Botany. Cr. 3. 18 lab. hrs.

MICROBIOLOGY

For Undergraduates

231. Bacteriology. Cr. 3. 6 lec. hrs., 9 lab. hrs.

ZOOLOGY

For Graduates

531. Problems in Zoology. Cr. 3. 18 lec. hrs.
631. Master's Thesis. Cr. 3.

Chemistry

First Term

For Undergraduates

141. General Chemistry. Cr. 4. 7½ lec. hrs., 9 lab. hrs.
341. Introductory Organic Chemistry. Cr. 4. 7½ lec. hrs., 9 lab. hrs.

For Undergraduates and Graduates (Graduate Minor Only)

325. Organic Chemistry Laboratory. Cr. 2. 18 lab. hrs.
335. Organic Chemistry. Cr. 3. 7½ lec. hrs.

For Graduates

531. Research. Cr. 3.
631. Master's Thesis. Cr. 3.
831. Doctor's Dissertation. Cr. 3.

Second Term

For Undergraduates

142. General Chemistry. Cr. 4. 7½ lec. hrs., 9 lab. hrs.

For Undergraduates and Graduates (Graduate Minor Only)

326. Organic Chemistry Laboratory. Cr. 2. 18 lab. hrs.
336. Organic Chemistry. Cr. 3. 7½ lec. hrs.

For Graduates

532. Research. Cr. 3.
631. Master's Thesis. Cr. 3.
831. Doctor's Dissertation. Cr. 3.

* A student may register for this course only with the permission of Paul V. Prior, Director of the Summer Institute for High School Biology Teachers.

Classical and Romance Languages

First Term

FRENCH

For Undergraduates

- 141. A Beginning Course in French. Cr. 4.
- 231. A Second Course in French. Cr. 3.
- 331. French Life and Literature. Cr. 3.

For Undergraduates and Graduates

- 4311. The Classical Theater. Cr. 3.

For Graduates

- 5312. Studies in French Language and Literature I. Cr. 3.
- 630. Master's Report. Cr. 3.
- 631. Master's Thesis. Cr. 3.

LATIN

For Undergraduates

- 131. A Beginning Course in Latin. Cr. 3.
- 231. A Second Course in Latin. Cr. 3.

LINGUISTICS

For Graduates

- 5311. Linguistic Techniques in Teaching Romance Languages. Cr. 3.
(Given during the first two weeks.)

SPANISH

For Undergraduates

- 141. A Beginning Course in Spanish. Cr. 4.
- 231. A Second Course in Spanish. Cr. 3.
- 331. Masterpieces of the Hispanic World. Cr. 3.

For Undergraduates and Graduates

- 436. Advanced Composition and Conversation. Cr. 3.
- 4316. A Survey of Spanish Literature. Cr. 3.

For Graduates

- 5312. Studies in Spanish and Spanish American Literature. Cr. 3.
- 630. Master's Report. Cr. 3.
- 631. Master's Thesis. Cr. 3.

Second Term

FRENCH

For Undergraduates

- 142. A Beginning Course in French. Cr. 4.
- 232. A Second Course in French. Cr. 3.
- 332. French Life and Literature. Cr. 3.

For Undergraduates and Graduates

- 438. Twentieth Century Drama and Poetry. Cr. 3.

For Graduates

- 630. Master's Report. Cr. 3.
- 631. Master's Thesis. Cr. 3.

LATIN

For Undergraduates

- 132. A Beginning Course in Latin. Cr. 3.
- 232. A Second Course in Latin. Cr. 3.

SPANISH

For Undergraduates

- 142. A Beginning Course in Spanish. Cr. 4.
- 232. A Second Course in Spanish. Cr. 3.
- 332. Masterpieces of the Hispanic World. Cr. 3.

For Undergraduates and Graduates

- 4317. A Survey of Spanish Literature. Cr. 3.
- 4328. Spanish Civilization. Cr. 3. (Given in Mexico.)
- 4329. Spanish Civilization. Cr. 3. (Given in Mexico.)

ZOOLOGY

For Undergraduates

243. Human Anatomy and Physiology. Cr. 4. 9 lec. hrs., 9 lab. hrs.

For Undergraduates and Graduates

333. Parasitology. Cr. 3. 6 lec. hrs., 9 lab. hrs.
439. Comparative Animal Physiology. Cr. 3. 6 lec. hrs., 9 lab. hrs.

For Graduates

531. Problems in Zoology. Cr. 3. 18 lab. hrs.
631. Master's Thesis. Cr. 3.

Second Term

BIOLOGY

For Undergraduates

141. Botany. Cr. 4. 9 lec. hrs., 9 lab. hrs.
142. Zoology. Cr. 4. 9 lec. hrs., 9 lab. hrs.

For Undergraduates and Graduates

331. *Heredity. Cr. 3. 18 lec. hrs. First 3 weeks.
333. *Bio-Ecology. Cr. 3. 18 lec. hrs. First 3 weeks.

BOTANY

For Graduates

531. Problems in Botany. Cr. 3. 18 lab. hrs.

MICROBIOLOGY

For Undergraduates

231. Bacteriology. Cr. 3. 6 lec. hrs., 9 lab. hrs.

ZOOLOGY

For Graduates

531. Problems in Zoology. Cr. 3. 18 lec. hrs.
631. Master's Thesis. Cr. 3.

Chemistry

First Term

For Undergraduates

141. General Chemistry. Cr. 4. 7½ lec. hrs., 9 lab. hrs.
341. Introductory Organic Chemistry. Cr. 4. 7½ lec. hrs., 9 lab. hrs.

For Undergraduates and Graduates (Graduate Minor Only)

325. Organic Chemistry Laboratory. Cr. 2. 18 lab. hrs.
335. Organic Chemistry. Cr. 3. 7½ lec. hrs.

For Graduates

531. Research. Cr. 3.
631. Master's Thesis. Cr. 3.
831. Doctor's Dissertation. Cr. 3.

Second Term

For Undergraduates

142. General Chemistry. Cr. 4. 7½ lec. hrs., 9 lab. hrs.

For Undergraduates and Graduates (Graduate Minor Only)

326. Organic Chemistry Laboratory. Cr. 2. 18 lab. hrs.
336. Organic Chemistry. Cr. 3. 7½ lec. hrs.

For Graduates

532. Research. Cr. 3.
631. Master's Thesis. Cr. 3.
831. Doctor's Dissertation. Cr. 3.

* A student may register for this course only with the permission of Paul V. Prior, Director of the Summer Institute for High School Biology Teachers.

Classical and Romance Languages

First Term

FRENCH

For Undergraduates

141. A Beginning Course in French. Cr. 4.
231. A Second Course in French. Cr. 3.
331. French Life and Literature. Cr. 3.

For Undergraduates and Graduates

4311. The Classical Theater. Cr. 3.

For Graduates

5312. Studies in French Language and Literature I. Cr. 3.
630. Master's Report. Cr. 3.
631. Master's Thesis. Cr. 3.

LATIN

For Undergraduates

131. A Beginning Course in Latin. Cr. 3.
231. A Second Course in Latin. Cr. 3.

LINGUISTICS

For Graduates

5311. Linguistic Techniques in Teaching Romance Languages. Cr. 3.
(Given during the first two weeks.)

SPANISH

For Undergraduates

141. A Beginning Course in Spanish. Cr. 4.
231. A Second Course in Spanish. Cr. 3.
331. Masterpieces of the Hispanic World. Cr. 3.

For Undergraduates and Graduates

436. Advanced Composition and Conversation. Cr. 3.
4316. A Survey of Spanish Literature. Cr. 3.

For Graduates

5312. Studies in Spanish and Spanish American Literature. Cr. 3.
630. Master's Report. Cr. 3.
631. Master's Thesis. Cr. 3.

Second Term

FRENCH

For Undergraduates

142. A Beginning Course in French. Cr. 4.
232. A Second Course in French. Cr. 3.
332. French Life and Literature. Cr. 3.

For Undergraduates and Graduates

438. Twentieth Century Drama and Poetry. Cr. 3.

For Graduates

630. Master's Report. Cr. 3.
631. Master's Thesis. Cr. 3.

LATIN

For Undergraduates

132. A Beginning Course in Latin. Cr. 3.
232. A Second Course in Latin. Cr. 3.

SPANISH

For Undergraduates

142. A Beginning Course in Spanish. Cr. 4.
232. A Second Course in Spanish. Cr. 3.
332. Masterpieces of the Hispanic World. Cr. 3.

For Undergraduates and Graduates

4317. A Survey of Spanish Literature. Cr. 3.
4328. Spanish Civilization. Cr. 3. (Given in Mexico.)
4329. Spanish Civilization. Cr. 3. (Given in Mexico.)

For Graduates

630. Master's Report. Cr. 3.
631. Master's Thesis. Cr. 3.

English

First Term

For Undergraduates

131. College Rhetoric. Cr. 3.
132. College Rhetoric. Cr. 3.
231. Masterpieces of Literature. Cr. 3.
232. Masterpieces of Literature. Cr. 3.
330. Early English Literature: "Beowulf" through Malory. Cr. 3.
333. English Literature of the Seventeenth Century. Cr. 3.
335. Shakespeare. Cr. 3.
338. English Literature of the Eighteenth Century. Cr. 3.
3322. British Literature of the Twentieth Century. Cr. 3.
3323. American Literature and Its Backgrounds. Cr. 3.
3324. American Literature and Its Backgrounds. Cr. 3.
3337. Advanced Grammar. Cr. 3.
3338. Introduction to Linguistic Science. Cr. 3.

For Undergraduates and Graduates
(Normally for Graduate Minor Credit Only)

433. Chaucer. Cr. 3.
434. Milton and His Age. Cr. 3.
4336. Teaching English in Secondary Schools. Cr. 3.
4337. English Literary History: A Synthesis. Cr. 3.
4349. Ancient and Medieval Literature. Cr. 3.

For Graduates

539. Studies in the Neo-Classical Age. Cr. 3.
5313. Studies in Modern European Literature. Cr. 3.
5318. Studies in Eighteenth Century American Literature. Cr. 3.
5322. Studies in Modern British Literature. Cr. 3.
5323. Studies in Nineteenth Century American Literature. Cr. 3.
5337. Studies in Linguistics. Cr. 3.
630. Master's Report. Cr. 3.
631. Master's Thesis. Cr. 3.
731. Research. Cr. 3.
732. Research. Cr. 3.
831. Doctor's Dissertation. Cr. 3.

Second Term

For Undergraduates

131. College Rhetoric. Cr. 3.
132. College Rhetoric. Cr. 3.
231. Masterpieces of Literature. Cr. 3.
232. Masterpieces of Literature. Cr. 3.
331. Short Story. Cr. 3.
335. Shakespeare. Cr. 3.
3314. Literature of the English Renaissance. Cr. 3.
3322. British Literature of the Twentieth Century. Cr. 3.
3323. American Literature and Its Backgrounds. Cr. 3.
3324. American Literature and Its Backgrounds. Cr. 3.
3326. American Literature of the Twentieth Century. Cr. 3.

For Undergraduates and Graduates
(Normally for Graduate Minor Credit Only)

4337. English Literary History: A Synthesis. Cr. 3.

For Graduates

533. Studies in Renaissance Literature. Cr. 3.
5314. Studies in Literary Criticism. Cr. 3.
5319. Studies in Shakespeare. Cr. 3.
5324. Studies in Twentieth Century American Literature. Cr. 3.
630. Master's Report. Cr. 3.
631. Master's Thesis. Cr. 3.
731. Research. Cr. 3.

732. Research. Cr. 3.
831. Doctor's Dissertation. Cr. 3.

Geosciences

First Term

GEOGRAPHY

For Undergraduates

2351. Regional Geography of the World. Cr. 3. 9 lec. hrs.

For Undergraduates and Graduates

4361. Geography of Europe. Cr. 3. 9 lec. hrs.

GEOLOGY

For Undergraduates

143. Physical Geology. Cr. 4. 9 lec. hrs., 6 lab. hrs.
363. Field Geology. Cr. 6. Given in the field. (Write to the department for specific information.)

For Graduates

535. Advanced Work in Specific Fields. Cr. 3.
536. Advanced Work in Specific Fields. Cr. 3.
631. Master's Thesis. Cr. 3.
731. Research. Cr. 3.
732. Research. Cr. 3.
831. Doctor's Dissertation. Cr. 3.

Second Term

GEOLOGY

For Undergraduates

143. Physical Geology. Cr. 4. 9 lec. hrs., 6 lab. hrs.
144. Historical Geology. Cr. 4. 9 lec. hrs., 6 lab. hrs.

For Graduates

535. Advanced Work in Specific Fields. Cr. 3.
536. Advanced Work in Specific Fields. Cr. 3.
631. Master's Thesis. Cr. 3.
731. Research. Cr. 3.
732. Research. Cr. 3.
831. Doctor's Dissertation. Cr. 3.

Germanic and Slavonic Languages

First Term

GERMAN

For Undergraduates

141. A Beginning Course in German. Cr. 4.
231. A Second Course in German. Cr. 3.
233. Scientific German. Cr. 3.

For Undergraduates and Graduates

435. Readings in German Language and Literature I. Cr. 3.

For Graduates

630. Master's Report. Cr. 3.
631. Master's Thesis. Cr. 3.

Second Term

GERMAN

For Undergraduates

142. A Beginning Course in German. Cr. 4.
232. A Second Course in German. Cr. 3.
234. Scientific German. Cr. 3.

For Graduates

630. Master's Report. Cr. 3.
631. Master's Thesis. Cr. 3.

Government

First Term

For Undergraduates

- 231. American Government, Organization. Cr. 3.
- 232. American Government, Functions. Cr. 3.
- 3361. International Politics. Cr. 3.
- 3371. Comparative Government. Cr. 3.

For Undergraduates and Graduates

- 4322. State Government. Cr. 3.
- 4342. Personnel Administration. Cr. 3.
- 4364. International Law. Cr. 3.
- 4374. Governments of Mexico and the Caribbean. Cr. 3.
- 4379. British Government. Cr. 3.

For Graduates

- 531. Readings and Research—Individual Study. Cr. 3.
- 532. Seminar in American Government and Politics. Cr. 3.
- 5361. Advanced International Relations. Cr. 3.
- 631. Master's Thesis. Cr. 3.
- 731. Research. Cr. 3.
- 831. Doctor's Dissertation. Cr. 3.

Second Term

For Undergraduates

- 231. American Government, Organization. Cr. 3.
- 232. American Government, Functions. Cr. 3.
- 3331. Great Political Thinkers. Cr. 3.
- 3361. International Politics. Cr. 3.

For Undergraduates and Graduates

- 4332. Modern Political Theory. Cr. 3.
- 4334. American Political Theory. Cr. 3.
- 4361. United States Foreign Policy. Cr. 3.
- 4373. Governments of Western Europe. Cr. 3.

For Graduates

- 531. Readings and Research—Individual Study. Cr. 3.
- 536. Seminar in International Relations. Cr. 3.
- 631. Master's Thesis. Cr. 3.
- 731. Research. Cr. 3.
- 831. Doctor's Dissertation. Cr. 3.

Health, Physical Education, and Recreation for Men

First Term

For Undergraduates (Men)

- 1113. Individual Activities.
 - Beginning Bowling. Cr. 1.
 - Beginning Golf. Cr. 1.
 - Beginning Swimming. Cr. 1.
- 1114. Dual Activities.
 - Beginning Tennis. Cr. 1.
- 230. Methods of Teaching Health in the Elementary and Secondary School. Cr. 3.

For Undergraduates and Graduates (Men)

- 4321. Methods and Techniques of Driver Instruction. Cr. 3.
- 4326. Safety Education. Cr. 3.

For Graduates

- 531. Administration of Physical Education. Cr. 3.
- 532. Supervision of Physical Education. Cr. 3.
- 533. Facilities for Physical Education. Cr. 3.
- 536. Problems in Health, Physical Education, and Recreation. Cr. 3.

5322. Organization and Administration of Interscholastic and Intercollegiate Athletic Programs. Cr. 3.
 631. Master's Thesis. Cr. 3.

Second Term

**For Undergraduates
(Men)**

1113. Individual Activities.
 Beginning Bowling. Cr. 1.
 Beginning Golf. Cr. 1.
 Beginning Swimming. Cr. 1.
 1114. Dual Activities.
 Beginning Tennis. Cr. 1.
 230. Methods of Teaching Health in the Elementary and Secondary School. Cr. 3.

Health, Physical Education, and Recreation for Women

First Term

**For Undergraduates
(Women)**

111. Body Conditioning. Cr. 1.
 114. Individual and Dual Activities.
 Beginning Archery. Cr. 1.
 Beginning Bowling. Cr. 1.
 Beginning Fencing. Cr. 1.
 Beginning Golf. Cr. 1.
 Beginning Gymnastics. Cr. 1.
 115. Team Activities.
 Beginning Speedball. Cr. 1.
 Beginning Volleyball. Cr. 1.

(Men and Women)

113. Rhythmic Activities.
 Beginning Folk Dance. Cr. 1.
 Beginning Modern Dance. Cr. 1.
 133. Personal and Community Health. Cr. 3.
 230. Methods of Teaching Health in the Elementary and Secondary School. Cr. 3.
 233. Methods of Teaching Physical Education in the Elementary School. Cr. 3.

**For Undergraduates and Graduates
(Men and Women)**

431. Kinesiology. Cr. 3.

**For Graduates
(Men and Women)**

536. Problems in Health, Physical Education, and Recreation. Cr. 3.
 537. Seminar in Health, Physical Education, and Recreation. Cr. 3.
 630. Master's Report. Cr. 3.
 631. Master's Thesis. Cr. 3.

Second Term

**For Undergraduates
(Women)**

111. Body Conditioning. Cr. 1.
 114. Individual and Dual Activities.
 Beginning Archery. Cr. 1.
 Beginning Bowling. Cr. 1.
 Beginning Tennis. Cr. 1.

(Men and Women)

113. Rhythmic Activities.
 Beginning Ballet. Cr. 1.
 Beginning Folk Dance. Cr. 1.
 Beginning Modern Dance. Cr. 1.

230. Methods of Teaching Health in the Elementary and Secondary School. Cr. 3.
 233. Methods of Teaching Physical Education in the Elementary School. Cr. 3.

**For Graduates
(Men and Women)**

534. Administration of the School Health Program. Cr. 3.
 535. Techniques of Research in Health, Physical Education, and Recreation. Cr. 3.
 536. Problems in Health, Physical Education, and Recreation. Cr. 3.
 630. Master's Report. Cr. 3.
 631. Master's Thesis. Cr. 3.

History

First Term

For Undergraduates

131. Development of Civilizations. Cr. 3.
 132. Development of Civilizations. Cr. 3.
 231. History of the United States to 1877. Cr. 3.
 232. History of the United States since 1877. Cr. 3.
 332. History of England to 1714. Cr. 3.

For Undergraduates and Graduates

4322. South America since Independence. Cr. 3.
 4328. The Trans-Mississippi West from 1803. Cr. 3.
 4339. Diplomatic History of the U.S. since 1900. Cr. 3.
 4354. The Far East. Cr. 3.
 4356. Africa since 1500. Cr. 3.
 4369. Europe since 1939. Cr. 3.

For Graduates

5314. Studies in the Frontier & Western American History. Cr. 3.
 5315. Problems in American History. Cr. 3.
 5316. Studies in Modern European History. Cr. 3.
 5321. Studies in British History. Cr. 3.
 631. Master's Thesis. Cr. 3.
 Enrollment required at least twice.
 633. Seminar in Southwestern History. Cr. 3.
 731. Research. Cr. 3.
 831. Doctor's Dissertation. Cr. 3.
 Enrollment required at least four times.

Second Term

For Undergraduates

132. Development of Civilizations. Cr. 3.
 231. History of the United States to 1877. Cr. 3.
 232. History of the United States since 1877. Cr. 3.
 330. History of Texas. Cr. 3.

For Undergraduates and Graduates

434. Early National Period in the United States. Cr. 3.
 4324. Mexico since Independence. Cr. 3.
 4335. Economic History of the United States since 1865. Cr. 3.
 4337. The United States since 1932. Cr. 3.
 4361. Classical Civilizations: Greece and Rome. Cr. 3.

For Graduates

5311. Studies in Southern History. Cr. 3.
 5312. Studies in Recent United States History. Cr. 3.
 5318. Studies in Renaissance and Reformation History. Cr. 3.
 631. Master's Thesis. Cr. 3.
 Enrollment required at least twice.
 633. Seminar in Southwestern History. Cr. 3.
 731. Research. Cr. 3.
 831. Doctor's Dissertation. Cr. 3.
 Enrollment required at least four times.

Journalism

First Term

For Undergraduates

3312. Nonfiction Writing. Cr. 3.
3313. Photojournalism. Cr. 3.

For Undergraduates and Graduates

411. Special Problems in Journalism. Cr. 1-3.
432. Journalism for the High School Teacher. Cr. 3

For Graduates

532. Seminar in Public Opinion and Propaganda. Cr. 3.
537. Seminar in the Press and Society. Cr. 3.

Second Term

(No Classes)

Mathematics

First Term

For Undergraduates*

131. Trigonometry. Cr. 3.
133. College Algebra. Cr. 3.
135. Fundamentals of Mathematics I. Cr. 3.
136. Fundamentals of Mathematics II. Cr. 3.
137. Introductory Mathematical Analysis. Cr. 3.
138. Introductory Mathematical Analysis. Cr. 3.
151. Analytical Geometry and Calculus I. Cr. 5.
152. Analytical Geometry and Calculus II. Cr. 5.
1315. Introductory College Mathematics. Cr. 3.
233. Linear Algebra. Cr. 3.
235. Analytical Geometry and Calculus III. Cr. 3.
332. Differential Equations I. Cr. 3.
335. Higher Mathematics for Engineers and Scientists I. Cr. 3.
3318. Finite Mathematical Structures. Cr. 3.

For Undergraduates and Graduates

434. Advanced Calculus. Cr. 3.
4314. Mathematical Statistics. Cr. 3.
4316. Introductory Point-Set Topology. Cr. 3.
4321. Elementary Modern Algebra. Cr. 3.
4324. Matrix Theory. Cr. 3.
4332. Selected Topics. Cr. 3.

For Graduates

511. Seminar. Cr. 1.
512. Seminar. Cr. 1.
531. Advanced Problems. Cr. 3.
536. Modern Algebra I. Cr. 3.
5314. Functions of a Real Variable I. Cr. 3.
5316. Topology I. Cr. 3.
5321. Methods of Applied Mathematics I. Cr. 3.
5335. Advanced Mathematics for Teachers I. Cr. 3.
5351. Advanced Topics in Geometry. Cr. 3.
5374. Advanced Mathematical Statistics I. Cr. 3.
631. Master's Thesis. Cr. 3.
831. Doctor's Dissertation. Cr. 3.

Second Term

For Undergraduates

131. Trigonometry. Cr. 3.
133. College Algebra. Cr. 3.
135. Fundamentals of Mathematics I. Cr. 3.
137. Introductory Mathematical Analysis. Cr. 3.

* Before enrolling for any mathematics course, the beginning freshman should consult with his major adviser or the Chairman of the Department of Mathematics regarding placement procedures.

- 138. Introductory Mathematical Analysis. Cr. 3.
- 151. Analytical Geometry and Calculus I. Cr. 5.
- 152. Analytical Geometry and Calculus II. Cr. 5.
- 1315. Introductory College Mathematics. Cr. 3.
- 235. Analytical Geometry and Calculus III. Cr. 3.
- 332. Differential Equations I. Cr. 3.
- 335. Higher Mathematics for Engineers and Scientists I. Cr. 3.
- 336. Higher Mathematics for Engineers and Scientists II. Cr. 3.
- 337. College Geometry. Cr. 3.
- 3318. Finite Mathematical Structures. Cr. 3.

For Undergraduates and Graduates

- 431. Teaching of Mathematics in Secondary Schools. Cr. 3.
- 435. Advanced Calculus. Cr. 3.
- 4310. Introduction to Numerical Analysis I. Cr. 3.
- 4315. Mathematical Statistics. Cr. 3.
- 4319. Elementary Functions of Complex Variables. Cr. 3.
- 4332. Selected Topics. Cr. 3.

For Graduates

- 511. Seminar. Cr. 1.
- 512. Seminar. Cr. 1.
- 531. Advanced Problems. Cr. 3.
- 537. Modern Algebra II. Cr. 3.
- 5315. Functions of a Real Variable II. Cr. 3.
- 5317. Topology II. Cr. 3.
- 5322. Methods of Applied Mathematics II. Cr. 3.
- 5336. Advanced Mathematics for Teachers II. Cr. 3.
- 5375. Advanced Mathematical Statistics II. Cr. 3.
- 631. Master's Thesis. Cr. 3.
- 831. Doctor's Dissertation. Cr. 3.

Music

First Term

APPLIED MUSIC

(Private Instruction in Baritone, Bassoon, Clarinet, Cornet, Flute, French Horn, Harp, Harpsichord, Oboe, Organ, Percussion, Piano, Saxophone, Trombone, Trumpet, Tuba, Viola, Violin, Violoncello, Voice.)

For Undergraduates

- 115, 116, 125, 126, 145, 146, 215, 216, 225, 226, 235, 236, 245, 246, 315, 316, 325, 326, 345, 346. Cr. 1-4. $\frac{3}{4}$ to $1\frac{1}{2}$ lec. hrs., 8 to 32 prac. hrs.

For Undergraduates and Graduates

- 425, 426, 435, 436, 445, 446. Cr. 2-4. $1\frac{1}{2}$ lec. hrs., 16 to 32 prac. hrs.

For Graduates

- 535, 545. Cr. 3-4. $1\frac{1}{2}$ lec. hrs., 24 to 32 prac. hrs.
- 533. Applied Music Literature, Graduate level. Cr. 3.

MUSIC EDUCATION

For Undergraduates

- 231. Music for Classroom Teachers. Cr. 3.

For Graduates

- 531. Seminar in Music Education. Cr. 3.
- 532. Choral Music Workshop. Cr. 3.
- 533. Instrumental Music Workshop. Cr. 3.
- 534. Marching Band Direction. Cr. 3.
- 630. Master's Report. Cr. 3.
- 631. Master's Thesis. Cr. 3.

MUSIC ENSEMBLE

For Undergraduates

- 113. Tech Band. Cr. 1.
- 313. Tech Band. Cr. 1.

For Graduates

- 510. Graduate Ensemble. Section 3, Band. Cr. 1.

MUSIC LITERATURE

For Undergraduates

238. Heritage of Music. Cr. 3.

For Graduates

531. Seminar in Music Literature. Cr. 3.

532. Choral Repertoire. Cr. 3.

MUSIC THEORY

For Undergraduates

143. Elementary Theory. Cr. 4.

243. Intermediate Theory. Cr. 4.

For Undergraduates and Graduates

333. Form and Composition. Cr. 3.

436. Modal Counterpoint. Cr. 3.

Second Term

APPLIED MUSIC

(Private Instruction in Instrument or Voice)

For Undergraduates

- 115, 116, 125, 126, 145, 146, 215, 216, 225, 226, 235, 236, 245, 246, 315, 316, 325, 326, 345, 346. Cr. 1-4.
- $\frac{3}{4}$
- to 1½ lec. hrs., 8 to 32 prac. hrs.

For Undergraduates and Graduates

- 425, 426, 435, 436, 445, 446. Cr. 2-4. 1½ lec. hrs., 16 to 32 prac. hrs.

For Graduates

- 535, 545. Cr. 3-4. 1½ lec. hrs., 24 to 32 prac. hrs.

MUSIC EDUCATION

For Undergraduates

231. Music for Classroom Teachers. Cr. 3.

232. Elementary Music Principles, Practices, and Materials. Cr. 3.

For Graduates

530. Seminar in Music Education. Cr. 3.

630. Master's Report. Cr. 3.

631. Master's Thesis. Cr. 3.

MUSIC ENSEMBLE

For Undergraduates

113. Tech Band. Cr. 1.

313. Tech Band. Cr. 1.

For Graduates

510. Graduate Ensemble, Section 3, Band. Cr. 1.

MUSIC LITERATURE

For Undergraduates

239. Heritage of Music. Cr. 3.

MUSIC THEORY

For Undergraduates

144. Elementary Theory. Cr. 4.

244. Intermediate Theory. Cr. 4.

For Undergraduates and Graduates

334. Form and Composition. Cr. 3.

427. Instrumentation. Cr. 2.

For Graduates

531. Seminar in Music Theory. Cr. 3.

Philosophy

First Term

For Undergraduates

230. Introduction to Philosophy. Cr. 3.

Second Term

For Undergraduates

230. Introduction to Philosophy. Cr. 3.

Physics*First Term*

For Undergraduates

141. General Physics. Cr. 4. 9 lec. hrs., 9 lab. hrs.
 143. Principles of Physics I. Cr. 4. 9 lec. hrs., 9 lab. hrs.
 241. Principles of Physics II. Cr. 4. 9 lec. hrs., 9 lab. hrs.
 335. Electricity and Magnetism. Cr. 3. 9 lec. hrs.

For Undergraduates and Graduates

434. Mechanics. Cr. 3. 9 lec. hrs.

For Graduates

536. Advanced Dynamics. Cr. 3. 9 lec. hrs.
 631. Master's Thesis. Cr. 3.
 831. Doctor's Dissertation. Cr. 3.

Second Term

For Undergraduates

142. General Physics. Cr. 4. 9 lec. hrs., 9 lab. hrs.
 241. Principles of Physics II. Cr. 4. 9 lec. hrs., 9 lab. hrs.
 242. Principles of Physics III. Cr. 4. 9 lec. hrs., 9 lab. hrs.
 336. Electricity and Magnetism. Cr. 3. 9 lec. hrs.

For Undergraduates and Graduates

435. Mechanics. Cr. 3. 9 lec. hrs.

For Graduates

535. Introduction to Statistical Physics. Cr. 3. 9 lec. hrs.
 631. Master's Thesis. Cr. 3.
 831. Doctor's Dissertation. Cr. 3.

Psychology*First Term*

For Undergraduates

230. General Psychology I. Cr. 3.
 331. Child Psychology. Cr. 3.
 335. Adolescent Psychology. Cr. 3.

For Undergraduates and Graduates

435. Abnormal Psychology. Cr. 3.
 436. Personality Development. Cr. 3.
 4317. The Psychology of Learning. Cr. 3.
 4326. Individual Problems Course. Cr. 3.

For Graduates

532. Problems in Psychology. Cr. 3.
 534. Practicum in Psychological Testing. Cr. 3.
 5314. Tests and Measurements. Cr. 3.
 5316. Introduction to Adjustment Counseling and Psychotherapy. Cr. 3.
 5317. Techniques of Counseling: Career Guidance. Cr. 3.
 5318. Practicum in Techniques of Counseling. Cr. 3.
 5360. Seminar in Verbal Behavior. Cr. 3.
 5361. Advanced Practicum in Counseling and Clinical Psychology. Cr. 3.
 5362. Internship in Counseling and Clinical Psychology. Cr. 3.
 631. Master's Thesis. Cr. 3.
 831. Doctor's Dissertation. Cr. 3.

Second Term

For Undergraduates

230. General Psychology I. Cr. 3.
 331. Child Psychology. Cr. 3.
 332. Mental Health. Cr. 3.
 335. Adolescent Psychology. Cr. 3.

For Undergraduates and Graduates

- 434. Introduction to Social Psychology. Cr. 3.
- 436. Personality Development. Cr. 3.
- 4316. History of Psychology. Cr. 3.
- 4319. Human Learning. Cr. 3.
- 4326. Individual Problems Course. Cr. 3.

For Graduates

- 532. Problems in Psychology. Cr. 3.
- 534. Practicum in Psychological Testing. Cr. 3.
- 539. Occupational Information and Career Patterns. Cr. 3.
- 5317. Techniques of Counseling: Career Guidance. Cr. 3.
- 5318. Practicum in Techniques of Counseling. Cr. 3.
- 5346. Seminar in Human Factors. Cr. 3.
- 5356. Motivation. Cr. 3.
- 5361. Advanced Practicum in Counseling and Clinical Psychology. Cr. 3.
- 5362. Internship in Counseling and Clinical Psychology. Cr. 3.
- 631. Master's Thesis. Cr. 3.
- 831. Doctor's Dissertation. Cr. 3.

Sociology and Anthropology

First Term

SOCIOLOGY

For Undergraduates

- 230. Introduction to Sociology. Cr. 3.
- 235. The Sociology of Marriage. Cr. 3.

For Undergraduates and Graduates

- 4312. The Urban Community. Cr. 3.
- 4314. Social Stratification. Cr. 3.

For Graduates

- 531. Sociological Theory. Cr. 3.
- 5335. Society and Its Institutions. Cr. 3.
- 631. Master's Thesis. Cr. 3.

ANTHROPOLOGY

For Undergraduates

- 232. Cultural Anthropology. Cr. 3.

For Undergraduates and Graduates

- 460. Introduction to Field Research in Prehistory. Cr. 6.

Second Term

SOCIOLOGY

For Undergraduates

- 230. Introduction to Sociology. Cr. 3.
- 233. Current Social Problems. Cr. 3.

For Undergraduates and Graduates

- 4313. American Minority Problems. Cr. 3.

For Graduates

- 531. Sociological Theory. Cr. 3.
- 631. Master's Thesis. Cr. 3.

ANTHROPOLOGY

For Undergraduates

- 232. Cultural Anthropology. Cr. 3.

Speech

First Term

For Undergraduates

- 133. Voice and Diction. Cr. 3.
- 231. Introduction to the Theater and Cinema. Cr. 3.
- 239. Speech Development for Personal Competence. Cr. 3.

- 317. Radio-Television Activities. Cr. 1.
- 319. Theater Activities. Cr. 1.
- 331. Speech Anatomy and Physiology. Cr. 3.
- 338. Business and Professional Speech. Cr. 3.
- 432. Senior Projects in Speech. Cr. 3.

For Undergraduates and Graduates

- 433. Introduction to Hearing Problems. Cr. 3.
- 4321. Supervised Clinical Practice in Speech Correction. Cr. 3.
- 4322. Supervised Clinical Practice in Speech Correction. Cr. 3.
- 4323. Supervised Clinical Practice in Audiology and Aural Rehabilitation. Cr. 3.
- 4324. Supervised Clinical Practice in Audiology and Aural Rehabilitation. Cr. 3.

For Graduates

- 531. Studies and Problems in Speech. Cr. 3.
 - 5314. Seminar in Audiology: Clinical Audiology. Cr. 3.
 - 5322. Theory and Practice of Stage Lighting. Cr. 3.
 - 5325. Contemporary Rhetorical Theory and Practice. Cr. 3.
 - 5326. Graduate Clinical Practice—Speech. Cr. 3.
 - 5327. Graduate Clinical Practice—Hearing. Cr. 3.
 - 631. Master's Thesis. Cr. 3.
- Enrollment required at least twice.

Second Term

For Undergraduates

- 239. Speech Development for Personal Competence. Cr. 3.
- 317. Radio-Television Activities. Cr. 3.
- 319. Theater Activities. Cr. 1.
- 338. Business and Professional Speech. Cr. 3.
- 432. Senior Projects in Speech. Cr. 3.

For Undergraduates and Graduates

- 4318. Speech Pathology. Cr. 3.
- 4321. Supervised Clinical Practice in Speech Correction. Cr. 3.
- 4322. Supervised Clinical Practice in Speech Correction. Cr. 3.
- 4325. Directing School Speech Activities. Cr. 3.

For Graduates

- 511. Studies and Problems in Speech. Cr. 1.
 - 521. Studies and Problems in Speech. Cr. 2.
 - 531. Studies and Problems in Speech. Cr. 3.
 - 631. Master's Thesis. Cr. 3.
- Enrollment required at least twice.

School of Business Administration

Course offerings in every department of the School of Business Administration will comprise the curricula for the 1968 summer session. The entering freshman may find it advantageous to begin his degree program at this time, while the advanced student may wish to take the opportunity to accelerate the completion of his degree requirements. For these reasons, programs of study are provided at all levels from freshman through graduate standing.

At the graduate level, the School of Business Administration provides courses during the summer in each of its departments. Programs are offered in all departments leading to the degrees of Doctor of Business Administration, and Master of Business Administration, in the Department of Accounting leading to the Master of Science in Accounting, in the Department of Economics leading to the Master of Arts, and Department of Business Education leading to the Master of Education.

Accounting

First Term

For Undergraduates

- 121. Elementary Mechanical Coding. Cr. 2. 5½ lec. hrs., 3 lab. hrs.
- 232. Electronic Data Processing I. Cr. 3.
- 233. Electronic Data Processing II. Cr. 3.
- 234. Elementary Accounting I. Cr. 3. 7½ lec. hrs., 3 lab. hrs.
- 235. Elementary Accounting II. Cr. 3. 7½ lec. hrs., 3 lab. hrs.
- 246. Machine Accounting. Cr. 4. 7½ lec. hrs., 7½ lab. hrs.
- 331. Managerial Accounting. Cr. 3.
- 332. Analysis of Financial Statements. Cr. 3.
- 334. Intermediate Accounting I. Cr. 3.
- 336. Principles of Cost Accounting. Cr. 3.

For Undergraduates and Graduates

- 430. Income Tax Accounting. Cr. 3.
- 434. Advanced Accounting I. Cr. 3.
- 436. Accounting Systems. Cr. 3.
- 437. Principles of Auditing. Cr. 3.

For Graduates

- 531. Controllership. Cr. 3.
- 533. Current Accounting Theory. Cr. 3.
- 537. CPA Review II. Cr. 3.
- 5311. Advanced Accounting Problems I. Cr. 3.
- 5312. Advanced Accounting Problems II. Cr. 3.
- 5351. Advanced Accounting Theory and Practice. Cr. 3.
- 731. Research. Cr. 3.

Second Term

For Undergraduates

- 232. Electronic Data Processing I. Cr. 3.
- 234. Elementary Accounting I. Cr. 3. 7½ lec. hrs., 3 lab. hrs.
- 235. Elementary Accounting II. Cr. 3. 7½ lec. hrs., 3 lab. hrs.
- 246. Machine Accounting. Cr. 4. 7½ lec. hrs., 7½ lab. hrs.
- 322. Payroll Accounting. Cr. 2.
- 331. Managerial Accounting. Cr. 3.
- 332. Analysis of Financial Statements. Cr. 3.
- 335. Intermediate Accounting II. Cr. 3.

For Undergraduates and Graduates

- 431. Advanced Income Tax Accounting. Cr. 3.
- 435. Advanced Accounting II. Cr. 3.
- 438. Advanced Auditing. Cr. 3.

For Graduates

- 536. CPA Review I. Cr. 3.
- 5311. Advanced Accounting Problems I. Cr. 3.
- 5312. Advanced Accounting Problems II. Cr. 3.
- 5341. Managerial Accounting I. Cr. 3.
- 731. Research. Cr. 3.

Business Administration

First Term

For Graduates

- 5341. Research Methods in Business. Cr. 3.
- 630. Master's Report. Cr. 3.
- 631. Master's Thesis. Cr. 3.
- 831. Doctor's Dissertation. Cr. 3.

Second Term

For Graduates

- 630. Master's Report. Cr. 3.
- 631. Master's Thesis. Cr. 3.
- 831. Doctor's Dissertation. Cr. 3.

Business Education and Secretarial Administration

First Term

BUSINESS EDUCATION

For Graduates

537. Research and Improvement of Instruction in Office Procedures. Cr. 3. June 7-23.
 538. Research and Improvement of Instruction in Shorthand. Cr. 3.
 5311. Organization and Administration of Vocational Education. Cr. 3.

SECRETARIAL ADMINISTRATION

For Undergraduates

327. Report Writing. Cr. 2.
 333. Business Correspondence. Cr. 3.

Second Term

BUSINESS EDUCATION

For Graduates

530. Foundations of Business Education. Cr. 3.
 535. Seminar in Business Education. (Jordanian students only.) Cr. 3.
 539. Research and Improvement of Instruction in Typewriting. Cr. 3.

SECRETARIAL ADMINISTRATION

For Undergraduates

327. Report Writing. Cr. 2.
 333. Business Correspondence. Cr. 3.

Economics

First Term

For Undergraduates

133. The Development of American Business and Economic Institutions I. Cr. 3.
 231. Principles of Economics I. Cr. 3.
 232. Principles of Economics II. Cr. 3.
 331. Economics of Business Enterprise. Cr. 3.

For Undergraduates and Graduates

430. Development of Economic Doctrines. Cr. 3.

For Graduates

531. Economic Research. Cr. 3.
 5335. Human Geography. Cr. 3.
 5341. Price and Income Theory. Cr. 3.
 5352. Advanced Macro-Economic Analysis. Cr. 3.

Second Term

For Undergraduates

133. The Development of American Business and Economic Institutions I. Cr. 3.
 134. The Development of American Business and Economic Institutions II. Cr. 3.
 231. Principles of Economics I. Cr. 3.
 232. Principles of Economics II. Cr. 3.
 237. Economic Geography. Cr. 3.

For Undergraduates and Graduates

437. Current Economic Problems. Cr. 3.

For Graduates

531. Economic Research. Cr. 3.

Finance

First Term

FINANCE

For Undergraduates

231. Personal Finance. Cr. 3.

- 331. Corporation Finance. Cr. 3.
- 333. Principles of Money, Banking, and Credit. Cr. 3.
- 335. General Insurance. Cr. 3.

For Undergraduates and Graduates

- 431. The Federal Reserve System. Cr. 3.

For Graduates

- 531. Current Financial Problems. Cr. 3.
- 533. Seminar in Investment Analysis. Cr. 3.
- 5341. Current Business Financial Practices. Cr. 3.

BUSINESS LAW

For Undergraduates

- 338. Business Law I. Cr. 3.
- 339. Business Law II. Cr. 3.

Second Term

FINANCE

For Undergraduates

- 331. Corporation Finance. Cr. 3.
- For Undergraduates and Graduates**
- 433. Corporate Financial Problems and Cases. Cr. 3.
 - 434. Investments. Cr. 3.
 - 438. Bank Administration. Cr. 3.

For Graduates

- 531. Current Financial Problems. Cr. 3.

BUSINESS LAW

For Undergraduates

- 338. Business Law I. Cr. 3.
- 339. Business Law II. Cr. 3.

Management

First Term

For Undergraduates

- 110. Professional Careers in Business. Cr. 1.
- 331. Industrial Management. Cr. 3.
- 334. Personnel Administration I. Cr. 3.

For Undergraduates and Graduates

- 432. Administrative Policy. Cr. 3.
- 439. Production II. Cr. 3.
- 4331. Collective Bargaining. Cr. 3.

For Graduates

- 511. Individual Problems. Cr. 1.
- 530. Individual Research in Management. Cr. 3.
- 536. Management of Human Resources. Cr. 3.
- 5351. Decision Theory and Management Science. Cr. 3.
- 5352. Administrative Organization. Cr. 3.

Second Term

For Undergraduates

- 331. Industrial Management. Cr. 3.
- 334. Personnel Administration I. Cr. 3.

For Undergraduates and Graduates

- 432. Administrative Policy. Cr. 3.
- 4331. Collective Bargaining. Cr. 3.

For Graduates

- 511. Individual Problems. Cr. 1.
- 530. Individual Research in Management. Cr. 3.
- 535. Human Behavior in Business. Cr. 3.
- 5341. Management Decision Making. Cr. 3.

Marketing

First Term

For Undergraduates

246. Introduction to Business Statistics. Cr. 4. 7½ lec. hrs., 7½ lab. hrs.
 332. Principles of Marketing. Cr. 3.
 334. Principles of Advertising. Cr. 3.
 335. Principles of Retailing. Cr. 3.

For Undergraduates and Graduates

433. Marketing Problems. Cr. 3.
 436. Marketing Research and Analysis. Cr. 3.

For Graduates

- 536, 537. Individual Study in Marketing I, II. Cr. 3 each.
 5341. Marketing Administration. Cr. 3.

Second Term

For Undergraduates

246. Introduction to Business Statistics. Cr. 4. 7½ lec. hrs., 7½ lab. hrs.
 332. Principles of Marketing. Cr. 3.
 334. Principles of Advertising. Cr. 3.
 335. Principles of Retailing. Cr. 3.
 339. Principles of Salesmanship. Cr. 3.

For Graduates

- 536, 537. Individual Study in Marketing I, II. Cr. 3 each.
 5341. Marketing Administration. Cr. 3.
 5352. Statistical Decision Making. Cr. 3.

School of Education

Education

First Term

For Undergraduates

332. Educational Psychology. Cr. 3.

For Undergraduates and Graduates

430. History and Philosophy of Education. Cr. 3.
 438. Educational Measurement and Evaluation. Cr. 3.
 4331. Foundations of Educational Sociology. Cr. 3.

For Graduates

530. Advanced Educational Psychology. Cr. 3.
 533. General Public School Administration. Cr. 3.
 539. Administration of School Business Services. Cr. 3.
 5139. Advanced Education Workshops in Teaching and Administration.
 (Three one-week sessions.) Cr. 1. each.
 5312. Supervision in the Elementary School. Cr. 3.
 5313. Supervision in the Secondary School. Cr. 3.
 5331. Human Development in Education. Cr. 3.
 5346. Advanced Curriculum Development. Cr. 3.
 5349. Organizing and Administering the Instructional Improvement Program.
 (Three-week course.) Cr. 3.
 5351. General Education Seminar. Cr. 3.
 5366. The Administration of School Staff Personnel. Cr. 3.
 5372. Organization and Administration of Guidance and Personnel Services.
 Cr. 3.
 5382. Guidance and the Classroom Teacher. Cr. 3.
 5383. Information Services in Guidance. Cr. 3.
 5384. Group Techniques in Guidance. Cr. 3.
 630. Master's Report. Cr. 3.

631. Master's Thesis. Cr. 3.
 635, 636. Internship in Education. Cr. 3 each.
 731, 732. Research. Cr. 3 each.
 831. Doctor's Dissertation. Cr. 3.

Second Term

For Undergraduates

332. Educational Psychology. Cr. 3.

For Undergraduates and Graduates

430. History and Philosophy of Education. Cr. 3.
 4331. Foundations of Educational Sociology. Cr. 3.

For Graduates

530. Advanced Educational Psychology. Cr. 3.
 534. Advanced Educational Sociology. Cr. 3.
 5139. Advanced Education Workshops in Teaching and Administration.
 (Three one-week sessions.) Cr. 1 each.
 5323. Advanced Educational Statistics. Cr. 3.
 5325. Legal Bases of Education. Cr. 3.
 5331. Human Development in Education. Cr. 3.
 5346. Advanced Curriculum Development. Cr. 3.
 5359. Seminar in Supervision. (Three-week course.) Cr. 3.
 5364. Seminar in Education Psychology. Cr. 3.
 5369. School Public Relations. Cr. 3.
 5371. General Supervision. Cr. 3.
 5372. Organization and Administration of Guidance and Personnel Services.
 Cr. 3.
 5373. Educational Evaluation. Cr. 3.
 5382. Guidance and the Classroom Teacher. Cr. 3.
 5385. Guidance and Counseling in the Elementary School. Cr. 3.
 630. Master's Report. Cr. 3.
 631. Master's Thesis. Cr. 3.
 635, 636. Internship in Education. Cr. 3 each.
 731, 732. Research. Cr. 3 each.
 831. Doctor's Dissertation. Cr. 3.

Elementary Education

First Term

For Undergraduates

3331. Child Development and the Elementary School Curriculum. Cr. 3.
 3344. Language Arts in the Elementary School Curriculum. Cr. 3.
 3345. Social Studies in the Elementary Curriculum. Cr. 3.
 431. Student Observation and Teaching in the Elementary School. Cr. 3.
 4341. Teaching Arithmetic in the Elementary School. Cr. 3.
 4342. Teaching Reading in the Elementary School. Cr. 3.
 4343. Teaching Science in the Elementary School. Cr. 3.

For Undergraduates and Graduates

4344. Children's Literature. Cr. 3.

For Graduates

5341. Developing Arithmetic Programs in Elementary Education. Cr. 3.
 5342. Developing Reading Programs in Elementary Education. Cr. 3.
 5344. Developing Language Arts Programs in Elementary Education. Cr. 3.
 5345. Developing Social Studies Programs in Elementary Education. Cr. 3.
 5355. Seminar in Elementary Education. Cr. 3.

Second Term

For Undergraduates

3331. Child Development and the Elementary School Curriculum. Cr. 3.
 3344. Language Arts in the Elementary School Curriculum. Cr. 3.
 3345. Social Studies in the Elementary Curriculum. Cr. 3.
 4341. Teaching Arithmetic in the Elementary School. Cr. 3.
 4343. Teaching Science in the Elementary School. Cr. 3.

For Undergraduates and Graduates

4344. Children's Literature. Cr. 3.

For Graduates

- 5326. Reading Development in the Elementary School. Cr. 3.
- 5326. Reading Development in the Elementary School. Cr. 3.
- 5341. Developing Arithmetic Programs in Elementary Education. Cr. 3.
- 5342. Developing Reading Programs in Elementary Education. Cr. 3.
- 5343. Developing Natural and Physical Environment Concepts in Elementary Education. Cr. 3.
- 5344. Developing Language Arts Programs in Elementary Education. Cr. 3.
- 5345. Developing Social Studies Programs in Elementary Education. Cr. 3.

Secondary Education*First Term***For Undergraduates**

- 330. Foundations of Secondary Education. Cr. 3.
- 334. Curriculum Development in Secondary Education. Cr. 3.
- 436. Teaching in Secondary Schools. Cr. 3.
- 4315. Audio-Visual Education. Cr. 3.

For Graduates

- 5311. Audio-Visual Education. Cr. 3.
- 5319. Audio-Visual Production. Cr. 3.
- 5334. Teaching Reading in the Secondary School. Cr. 3.

*Second Term***For Undergraduates**

- 330. Foundations of Secondary Education. Cr. 3.
- 334. Curriculum Development in Secondary Education. Cr. 3.
- 436. Teaching in Secondary Schools. Cr. 3.
- 4315. Audio-Visual Education. Cr. 3.

For Graduates

- 5317. The Junior High School. Cr. 3.
- 5356. Seminar in Secondary Education. Cr. 3.

Special Education*First Term***For Undergraduates and Graduates**

- 4338. The Education of Exceptional Children. Cr. 3.
- 4352. Teaching the Child with Minimal Brain Dysfunction. Cr. 3.
- 4354. Education of the Mentally Retarded Child. Cr. 3.
- 4356. Education of the Deaf. (First three weeks). Cr. 3.
- 4357. Teaching Elementary School Subjects to the Deaf. (Second three weeks). Cr. 3.

*Second Term***For Undergraduates and Graduates**

- 4338. The Education of Exceptional Children. Cr. 3.
- 4339. Teaching the Educable Mentally Retarded. (Second three weeks). Cr. 3.
- 4353. Teaching the Physically Handicapped Child. Cr. 3.
- 4360. Teaching the Trainable Mentally Retarded. (First three weeks). Cr. 3.

For Graduates

- 5375. Education Appraisal of Exceptional Children. Cr. 3.
- 5377. Seminar in Special Education. (First three weeks). Cr. 3.
- 5378. Problems in Mental Retardation. (First three weeks). Cr. 3.

School of Engineering

The summer program in the School of Engineering makes available to the student course work at all levels from freshman through graduate. Although complete curricula will not be available, the offerings are planned to assist students wishing to accelerate their course of study.

Entering freshmen planning to major in any of the engineering programs or the architecture, construction option, are advised to take, in addition to the Scholastic Aptitude Test (SAT) required of all students admitted to the College, the Level I Achievement Test in Mathematics. Both are offered through the College Entrance Examination Board, Box 592, Princeton, New Jersey 08540. The Level I test is used to qualify students to begin their first year of mathematics with analytics and calculus. Those who make low scores, or do not take the test, will be required to complete mathematics courses in algebra and/or trigonometry before beginning their first course in analytics and calculus.

All the work of the freshman year will be available if the demand for these courses is sufficient. The entering freshman will devote his time to first-semester courses. Any high school graduate who desires to study engineering, but who does not meet requirements due to a low score on the achievement test, or who is deficient in algebra or trigonometry, could with profit attend the summer session in order to remove these conditions.

Students intending to transfer to Texas Technological College to study engineering may find the summer session of value in order to correct irregularities in their schedules or to take prerequisite subjects. For information not contained in this bulletin consult the current *General Catalog*, or write to the Dean of Admissions for information on entrance, or to the Dean of the School of Engineering in regard to the course of study.

Architecture

First Term

For Graduates

- 121. Freehand Drawing I. Cr. 2. 18 lab. hrs.
- 133. Introduction to Design & Theory. Cr. 3. 6 lec. hrs., 3 disc. hrs.
- 241. Architectural Design, Grade II. Cr. 4. 36 lab. hrs.

For Undergraduates and Graduates

- 323. History of Architecture: 19th & 20th Centuries. Cr. 2. 6 lec. hrs.
- 4331. Special Problems in Architecture and City Planning. Cr. 3. 7½ lec. hrs.

Second Term

For Undergraduates

- 134. Architectural Graphics. Cr. 3. 3 lec. hrs., 15 lab. hrs.
- 224. Freehand Drawing III. Cr. 2. 18 lab. hrs.
- 242. Architectural Design, Grade II. Cr. 4. 36 lab. hrs.

For Undergraduates and Graduates

- 4331. Special Problems in Architecture and City Planning. Cr. 3. 7½ lec. hrs.

Chemical Engineering

First Term

For Undergraduates

- 330. Engineering Materials Science. Cr. 3.
- 3311. Chemical Engineering I. Cr. 3.

For Graduates

- 5331. Special Problems in Chemical Engineering. Cr. 3.
- 631. Master's Thesis. Cr. 3.
- 731, 732. Research. Cr. 3 each.
- 831. Doctor's Dissertation. Cr. 3.

*Second Term***For Undergraduates**

330. Engineering Materials Science. Cr. 3.
 3312. Chemical Engineering II. Cr. 3.

For Graduates

5331. Special Problems in Chemical Engineering. Cr. 3.
 631. Master's Thesis. Cr. 3.
 731, 732. Research. Cr. 3 each.
 831. Doctor's Dissertation. Cr. 3.

Civil Engineering*First Term***For Undergraduates**

233. Statics. Cr. 3.
 332. Dynamics. Cr. 3.
 3311. Mechanics of Solids. Cr. 3.

For Undergraduates and Graduates

4121. Civil Engineering Seminar. Cr. 1.
 4331. Special Problems in Civil Engineering. Cr. 3.
 4343. Reinforced Concrete Structures I. Cr. 3.

For Graduates

5311. Advanced Mechanics of Solids. Cr. 3.
 5331. Advanced Work in Specific Fields. Cr. 3.
 630. Master's Report. Cr. 3.
 631. Master's Thesis. Cr. 3.
 731. Research. Cr. 3.
 831. Doctor's Dissertation. Cr. 3.

*Second Term***For Undergraduates**

233. Statics. Cr. 3.
 332. Dynamics. Cr. 3.
 3311. Mechanics of Solids. Cr. 3.

For Undergraduates and Graduates

4121. Civil Engineering Seminar. Cr. 1.
 4331. Special Problems in Civil Engineering. Cr. 3.

For Graduates

5331. Advanced Work in Specific Fields. Cr. 3.
 630. Master's Report. Cr. 3.
 631. Master's Thesis. Cr. 3.
 731. Research. Cr. 3.
 831. Doctor's Dissertation. Cr. 3.

Electrical Engineering*First Term***For Undergraduates**

231. Principles of Electrical Engineering. Cr. 3.
 233. Electrical Systems Analysis. Cr. 3.
 3311. Electronics I. Cr. 3.
 3321. Circuit Theory I. Cr. 3.
 3341. Electromagnetic Theory I. Cr. 3.
 3361. Electric and Magnetic Properties of Materials. Cr. 3.

For Undergraduates and Graduates

4121. Electrical Engineering Seminar. Cr. 1.
 4331. Special Problems in Electrical Engineering. Cr. 3.
 4351. Energy Conversion I. Cr. 3.
 4353. Feedback Control Systems. Cr. 3.

For Graduates

5317. Advanced Transients. Cr. 3.
 5322. Advanced Network Theory I. Cr. 3.

- 5331. Theoretical Investigations in Engineering Applications. Cr. 3.
- 5341. Advanced Electromagnetic Theory I. Cr. 3.
- 630. Master's Report. Cr. 3.
- 731. Research. Cr. 3.
- 831. Doctor's Dissertation. Cr. 3.

Second Term

For Undergraduates

- 232. Principles of Electrical Engineering. Cr. 3.
- 234. Electronics Instrumentation. Cr. 3.
- 3312. Electronics II. Cr. 3.
- 3322. Circuit Theory II. Cr. 3.
- 3323. Methods of Circuit Analysis. Cr. 3.
- 3342. Electromagnetic Theory II. Cr. 3.

For Undergraduates and Graduates

- 4121. Electrical Engineering Seminar. Cr. 1.
- 4317. Electronics III. Cr. 3.
- 4318. Physical Electronics. Cr. 3.
- 4331. Special Problems in Electrical Engineering. Cr. 3.
- 4352. Energy Conversion II. Cr. 3.

For Graduates

- 5323. Advanced Network Theory II. Cr. 3.
- 5327. Multistage Decision Processes. Cr. 3.
- 5332. Experimental Investigations in Engineering Applications. Cr. 3.
- 5342. Advanced Electromagnetic Theory II. Cr. 3.
- 5354. Direct Energy Conversion. Cr. 3.
- 630. Master's Report. Cr. 3.
- 732. Research. Cr. 3.
- 831. Doctor's Dissertation. Cr. 3.

Industrial Engineering

First Term

INDUSTRIAL ENGINEERING

For Undergraduates

- 321. Computer Programming Techniques. Cr. 2.
- 3311. Principles of Industrial Engineering I. Cr. 3.
- 3315. Industrial Statistics I. Cr. 3.

For Undergraduates and Graduates

- 417. Industrial Statistics Problem Laboratory. Cr. 1.
- 421. Materials Handling. Cr. 2.
- 4121. Industrial Engineering Seminar. Cr. 1.

For Graduates

- 5303. Advanced Work Analysis and Design. Cr. 3.
- 5311. Analysis Techniques for Management. Cr. 3.
- 5318. Selected Topics In Advanced Statistics. Cr. 3.
- 5331. Theoretical Studies In Advanced Industrial Engineering Topics. Cr. 3.
- 5351. Advanced Production Design. Cr. 3.
- 631. Master's Thesis. Cr. 3.
- 731. Research. Cr. 3.
- 831. Doctor's Dissertation. Cr. 3.

ENGINEERING GRAPHICS

For Undergraduates

- 121. Engineering Graphics I. Cr. 2.

Second Term

INDUSTRIAL ENGINEERING

For Undergraduates

- 321. Computer Programming Techniques. Cr. 2.
- 3321. Principles of Industrial Engineering II. Cr. 3.
- 3325. Industrial Statistics II. Cr. 3.

For Undergraduates and Graduates

417. Industrial Statistics Problem Laboratory. Cr. 1.
 4121. Industrial Engineering Seminar. Cr. 1.

For Graduates

5312. Analysis Techniques for Management. Cr. 3.
 5331. Theoretical Studies in Advanced Industrial Engineering Topics. Cr. 3.
 631. Master's Thesis. Cr. 3.
 732. Research. Cr. 3.
 831. Doctor's Dissertation. Cr. 3.

ENGINEERING GRAPHICS**For Undergraduates**

122. Engineering Graphics II. Cr. 2.

Mechanical Engineering*First Term***For Undergraduates**

3314. Mechanisms. Cr. 3.
 3321. Engineering Thermodynamics I. Cr. 3.
 3341. Materials I. Cr. 3.

For Undergraduates and Graduates

4121. Mechanical Engineering Seminar. Cr. 1.
 4312. Mechanical Engineering Laboratory I. Cr. 3.
 4314. Fluid Dynamics. Cr. 3.
 4316. Dynamics. Cr. 3.
 4333. Thermal Systems I. Cr. 3.

For Graduates

5326. Heat Transmission III. Cr. 3.
 5331. Theoretical Studies in Advanced Topics. Cr. 3.
 630. Master's Report. Cr. 3.
 631. Master's Thesis. Cr. 3.
 831. Doctor's Dissertation. Cr. 3.

*Second Term***For Undergraduates**

3315. Stress Analysis. Cr. 3.
 3321. Engineering Thermodynamics I. Cr. 3.

For Undergraduates and Graduates

4121. Mechanical Engineering Seminar. Cr. 1.
 4313. Mechanical Engineering Laboratory II. Cr. 3.
 4315. Heat and Mass Transfer. Cr. 3.
 4321. Engineering Thermodynamics II. Cr. 3.
 4331. Special Problems in Mechanical Engineering. Cr. 3.
 4334. Thermal Systems II. Cr. 3.

For Graduates

5331. Theoretical Studies in Advanced Topics. Cr. 3.
 630. Master's Report. Cr. 3.
 631. Master's Thesis. Cr. 3.
 831. Doctor's Dissertation. Cr. 3.

Petroleum Engineering*First Term***For Undergraduates and Graduates**

4121. Petroleum Engineering Seminar. Cr. 1.

*Second Term***For Undergraduates and Graduates**

4121. Petroleum Engineering Seminar. Cr. 1.

School of Home Economics

Course work in home economics is available to the beginner, to the undergraduate, and to the graduate, although greater emphasis is given in the summer to meeting the needs of graduate students.

In recognition of the increasing need on the part of graduate students for short courses, the School of Home Economics has provided a number of such courses and workshops. The courses carry varying semester-hour credit, depending upon length.

Detailed information is given in departmental listings in clothing and textiles, food and nutrition, home economics education, and home and family life. Special short courses and workshops are described more fully in the Workshop and Short Course section of this catalog.

Clothing and Textiles

First Term

For Undergraduates

333. Problems in Upholstering and Draperies. Cr. 3.

For Graduates

- 511-A. Advanced Clothing Problems. Cr. 1. (July 1-6).
531. Special Problems in Clothing and Textiles. Cr. 3.

Second Term

For Undergraduates

131. Wardrobe Analysis, Construction, and Buying. Cr. 3.
332. Dressmaker Tailoring and Design. Cr. 3.

For Graduates

- 511-B. Advanced Clothing Problems. Cr. 1. (Aug. 5-9).
511-C. Advanced Clothing Problems. Cr. 1. (Aug. 12-17).
531. Special Problems in Clothing and Textiles. Cr. 3.
631. Master's Thesis. Cr. 3.

Food and Nutrition

First Term

For Undergraduates

111. Food Service Workshop. Cr. 1. (June 4-8).
111. Food Service Workshop, advanced. Cr. 1. (June 10-14).

For Undergraduates and Graduates

421. Advanced Food Production Management. Cr. 2. (June 6-19).

For Graduates

515. Special Aspects of Food and Nutrition. Cr. 1. (June 10-14).
631. Master's Thesis. Cr. 3.

Second Term

For Graduates

515. Special Aspects of Food and Nutrition. Cr. 1. (July 29-Aug. 2).
534. Advanced Problems in Human Nutrition and Foods. Cr. 3. (August 5-20).

Home Economics Education

First Term

For Undergraduates

331. Philosophy and Principles of Vocational Home Economics. Cr. 3.

For Graduates

- 514-1. Specific Problems in Teaching Home Economics. Cr. 1. (July 9-13).
 533. Evaluation in Home Economics. Cr. 3.
 631. Master's Thesis. Cr. 3.

*Second Term***For Undergraduates and Graduates**

426. Problems in Student Teaching. Cr. 2.
 432. Methods of Teaching Home Economics. Cr. 3.

For Graduates

- 514-2,3. Specific Problems in Teaching Home Economics. Cr. 1 each.
 (July 15-19; July 22-26).

Home and Family Life*First Term***CHILD DEVELOPMENT AND FAMILY RELATIONS****For Undergraduates**

231. The Infant. Cr. 3.
 233. Child Growth and Development. Cr. 3.
 235. Preparation for Success in Marriage. Cr. 3.

For Undergraduates and Graduates

461. Student Teaching in the Preschool. Cr. 6.

HOME MANAGEMENT**For Undergraduates**

131. Development of Personal and Family Management. Cr. 3.
 232. General Home Management. Cr. 3.
 333. Household Equipment. Cr. 3.

For Undergraduates and Graduates

432. Home Management Living. Cr. 3. (Residence).
 432. Home Management Living. Cr. 3. (Nonresidence).

*Second Term***CHILD DEVELOPMENT AND FAMILY RELATIONS****For Undergraduates**

233. Child Growth and Development. Cr. 3.
 235. Preparation for Success in Marriage. Cr. 3.

For Undergraduates and Graduates

433. Family Relations. Cr. 3.

For Graduates

- 518-1. Seminar in Child Development and Family Relations. Cr. 1.
 (July 15-19).
 518-2. Seminar in Child Development and Family Relations. Cr. 1.
 (July 15-19).
 518-3. Seminar in Child Development and Family Relations. Cr. 1.
 (July 21-26).

School of Law

The summer session in the School of Law is open to students who have successfully completed one year of law study at Texas Tech or elsewhere, and are in good standing at their last preceding school.

During the summer of 1968 the School of Law will be privileged to have Dean Ray Forrester of the Cornell Law School as a visiting professor teaching one of his recognized specialties, Federal Jurisdiction.

Detailed information regarding admission, registration, and other aspects of the summer program in the School of Law may be obtained from the office of the Dean of the School of Law.

Summer Courses

- 6211. Federal Jurisdiction. Cr. 2. (June 5-July 6).
- 6312. Remedies. Cr. 3. (June 7-August 2).
- 6313. Marital Property. Cr. 3. (June 7-August 2).

Official Directory

Summer Session, 1968

Board of Directors, 1967-1968

Officers

ROY FURR, Chairman
C. A. CASH, Vice Chairman
J. ROY WELLS, Secretary

Members of the Board

Term Expires February 19, 1969		
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HERBERT ALLEN		Houston
HAROLD HINN		Dallas and Plainview
Term Expires February 19, 1971		
C. A. CASH		Amarillo
RETHA R. MARTIN		Lubbock
FLADGER F. TANNERY		Dallas
Term Expires February 19, 1973		
ALVIN R. ALLISON		Levelland
MARSHALL FORMBY		Plainview
CARL E. REISTLE, JR.		Houston

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Gerald Waylett Thomas, Ph.D., Interim Exec. V. Pres., Dean of the School of Agriculture & Prof. of Range Management
Sabe McClain Kennedy, Ph.D., V. Pres. for Academic Affairs & Prof. of Government
Marshall Lee Pennington, B.B.A., V. Pres. for Business Affairs
Bill J. Parsley, LL.B., V. Pres. for Development
James Roy Wells, M.B.A., Asst. to Pres. & Secty., Board of Directors
James George Allen, M.A., Dean of Student Life & Prof. of English
Richard Bruce Amandes, LL.M., Dean of the School of Law & Prof. of Law
James Wayland Bennett, Ph.D., Acting Dean of the School of Agriculture & Prof. of Agricultural Economics
Floyd D. Boze, Ed.D., Dean of Admissions & Part-time Prof. of Education
John Ross Bradford, Ph.D., Dean of the School of Engineering & Prof. of Chemical Engineering

George Gail Heather, Ph.D., Dean of the School of Business Administration & Prof. of Finance
Ray Curtis Janeway, M.S., Librarian
Lewis Norton Jones, M.A., Dean of Men
Lorrin Garfield Kenamer, Jr., Ph.D., Dean of the School of Arts & Sciences & Prof. of Geosciences
Donald McDonald, Ed.D., Acting Dean of the School of Education & Prof. of Education
Jacob Homer Millikin, M.A., Dir., Extension & Correspondence
Florence Louise Phillips, Ed.D., Dean of Women & Part-time Prof. of Psychology
Robert Byron Price, M.B.A., Comptroller & Asst. Prof. of Accounting
Fred Durnford Rigby, Ph.D., Dean of the Graduate School & Prof. of Mathematics
John Gates Taylor, Business Mgr.
Willis Vaughn Tinsley, Ph.D., Dean of the School of Home Economics & Prof. of Home Economics

School of Agriculture

Department of Agricultural Economics

Willard Forest Williams, Ph.D., Chmn. & Prof.
Marquis Lyndon Fowler, Ph.D., Prof.
James Wilton Graves, Ph.D., Assoc. Prof.
Herbert Warren Grubb, Ph.D., Assoc. Prof.
Hong Yong Lee, Ph.D., Asst. Prof.
James Ezra Osborn, Ph.D., Assoc. Prof.
Thomas Richard Owens, Ph.D., Assoc. Prof.

Department of Agricultural Education

Thomas Luther Leach, M.S., Chmn. & Prof.
Ulrich Lewis Eggenberger, Ph.D., Assoc. Prof.
Levi Marlin Hargrave, M.S., Prof.

Department of Agricultural Engineering

Willie Lee Ulich, Ph.D., Chmn. & Prof.
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